12/98

GenCore version 4.5
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OM protein - protein search, using sw model

Run on: August 29, 2001, 09:46:24 ; Search time 21.49 Seconds
(without alignments)
383.660 Million cell updates/sec

Title: US-09-457-066-2_COPY_210_345
Perfect score: 754
Sequence: 1 LDLEDLYRPTWQLLGKAFVF.....DVALEHHEECDCVCRGSTGG 136

Scoring table: BLOSUM62
Gapop 10.0 , Gapext 0.5

Searched: 412676 seqs, 60623988 residues

Total number of hits satisfying chosen parameters: 412676

Minimum DB seq length: 0
Maximum DB seq length: 2000000000

Post-processing: Minimum Match 0%
Maximum Match 100%
Listing first 45 summaries

Database : A_Geneseq_0601:*
1: /SIDS8/gcgdata/geneseq/geneseqp/AA1980.DAT:*
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6: /SIDS8/gcgdata/geneseq/geneseqp/AA1985.DAT:*
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8: /SIDS8/gcgdata/geneseq/geneseqp/AA1987.DAT:*
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15: /SIDS8/gcgdata/geneseq/geneseqp/AA1994.DAT:*
16: /SIDS8/gcgdata/geneseq/geneseqp/AA1995.DAT:*
17: /SIDS8/gcgdata/geneseq/geneseqp/AA1996.DAT:*
18: /SIDS8/gcgdata/geneseq/geneseqp/AA1997.DAT:*
19: /SIDS8/gcgdata/geneseq/geneseqp/AA1998.DAT:*
20: /SIDS8/gcgdata/geneseq/geneseqp/AA1999.DAT:*
21: /SIDS8/gcgdata/geneseq/geneseqp/AA2000.DAT:*
22: /SIDS8/gcgdata/geneseq/geneseqp/AA2001.DAT:*

Pred. No. is the number of results predicted by chance to have a score greater than or equal to the score of the result being printed, and is derived by analysis of the total score distribution.

SUMMARIES

Result No.	Score	% Query Match	Length	DB	ID	Description
1	754	100.0	318	21	AAY84558	A fragment of plat
2	754	100.0	339	21	AAB58438	Lung cancer associ
3	754	100.0	345	20	AAY33679	Human VEGF-E prote
4	754	100.0	345	20	AAY41766	Human PRO200 prote
5	754	100.0	345	20	AAY30023	Human vascular end
6	754	100.0	345	21	AAB48657	Human zvegf3, SEQ
7	754	100.0	345	21	AAB24250	Human platelet-der
8	754	100.0	345	21	AAB44322	Human PRO200 (UNQ1
9	754	100.0	345	21	AAB10633	Human RACE generat
10	754	100.0	345	21	AAB10634	Human VEGF-X homol
11	754	100.0	345	21	AAB10635	Human VEGF-X prote
12	754	100.0	345	21	AAB10636	Human VEGF-X prote
13	754	100.0	345	21	AAB10644	Human VEGF-X prote
14	754	100.0	345	21	AAB10650	Human 990126vegx p
15	754	100.0	345	21	AAB10651	Human VEGF-X prote
16	754	100.0	345	21	AAB19578	Human PRO200 (vasc
17	754	100.0	345	21	AAB33414	Human PRO200 prote
18	754	100.0	345	21	AAB24412	Human PRO713 prote
19	754	100.0	345	21	AAB01419	Human TANGO 128.
20	754	100.0	345	21	AAB03003	Human growth facto
21	754	100.0	345	21	AAY96858	Human growth facto
22	754	100.0	345	21	AAY84557	Amino acid sequenc
23	754	100.0	345	21	AAY59285	Bone morphogenic p
24	754	100.0	345	22	AAB50980	Human PRO200 prote
25	754	100.0	345	22	AAB49895	Human PRO200 prote
26	754	100.0	345	22	AAB53074	Human angiogenesis
27	754	100.0	374	21	AAB10639	Human VEGF-X prote
28	744	98.7	354	21	AAB10640	Human VEGF-X prote
29	744	98.7	354	21	AAB10641	Human VEGF-X prote
30	697	92.4	345	21	AAB48658	Mouse zvegf3, SEQ
31	697	92.4	345	21	AAY96861	Murine vascular en
32	697	92.4	345	21	AAY84559	A murine platelet-
33	646	85.7	149	21	AAB10642	Human VEGF-X PDGF-
34	607	80.5	113	21	AAB10631	Human VEGF-X prote
35	607	80.5	113	21	AAB10632	Human VEGF-X prote
36	590.5	78.3	227	21	AAB10637	Human VEGF-X prote
37	590.5	78.3	227	21	AAB10638	Human VEGF-X prote
38	346.5	46.0	282	21	AAB10653	Human VEGF-X prote
39	345.5	45.8	370	21	AAB48663	Mouse growth facto
40	344.5	45.7	322	21	AAY71129	Human Platelet Der
41	344.5	45.7	370	21	AAB48653	Human growth facto
42	344.5	45.7	370	21	AAY96864	SEQ. ID. 37 from W
43	344.5	45.7	370	21	AAY71130	Human Platelet Der
44	344.5	45.7	370	22	AAB60888	Human VEGF-G prote
45	343.5	45.6	370	22	AAB60895	Human VEGF-G prote

ALIGNMENTS

RESULT 1
AAY84558
ID AAY84558 standard; Protein; 318 AA.
XX
AC AAY84558;
XX
DT 25-JUL-2000 (first entry)
XX
DE A fragment of platelet-derived growth factor C (PDGF-C).
XX
KW Platelet-derived growth factor C; PDGF-C; cell proliferation;
KW growth factor; heparin; connective tissue; wound healing; VEGF-F;
KW fibroblast mitogenesis; PDGF alpha receptor activation; tumour growth;
KW choriocarcinoma; Wilms tumour; megakaryoblastic leukaemia;
KW lung carcinoma; erythroleukemia; tissue remodelling.
XX
OS Homo sapiens.
XX
FH Key Location/Qualifiers
FT Misc-difference 287
FT /note= "encoded by AAS"
XX
PN WO200018212-A2.
XX
PD 06-APR-2000.
XX
PF 30-SEP-1999; 99WO-US22668.
XX
PR 30-SEP-1998; 98US-0102461.
PR 12-NOV-1998; 98US-0108109.
PR 03-DEC-1998; 98US-0110749.
PR 18-DEC-1998; 98US-0113002.
PR 21-MAY-1999; 99US-0135426.
PR 15-JUL-1999; 99US-0144022.

XX
PA (LUDW-) LUDWIG INST CANCER RES.
PA (UYHE-) UNIV HELSINKI LICENSING LTD.
XX
PI Eriksson U, Aase K, Lee X, Ponten A, Uutela M, Alitalo K;
PI Oestman A, Heldin C, Betsholz C;
XX
DR WPI; 2000-292954/25.
DR N-PSDB; AAA12524.
XX
PT Novel DNA encoding PDGF-C useful to stimulate or enhance proliferation,
PT differentiation, growth and motility of cells expressing the PDGF-C
PT receptor -
XX
PS Disclosure; Fig 4; 135pp; English.
XX
CC The present sequence represents a human platelet-derived growth factor C
CC (PDGF-C) (formally designated VEGF-F) fragment. PDGF-C polypeptides have
CC the ability to stimulate and enhance proliferation or differentiation,
CC and/or growth or motility of cells expressing a PDGF-C receptor.
CC PDGF-C polypeptides can be used in pharmaceuticals for promoting cell
CC proliferation, preferably in combination with one other growth factor
CC and heparin. Pharmaceuticals comprising PDGF-C polypeptides can also
CC be used for stimulating connective tissue or wound healing. The
CC PDGF-C polypeptide can be enzymatically processed to generate the active
CC truncated form of PDGF-C and used to regulate the receptor-binding
CC specificity of PDGF-C. PDGF-C can also be used to promote fibroblast
CC mitogenesis in a mammal and to induce PDGF alpha receptor activation.
CC PDGF-C antagonists can be used to inhibit tumour growth of a tumour
CC expressing PDGF-C in a mammal. Specific types of human tumours, e.g.
CC choriocarcinoma, Wilms tumour, megakaryoblastic leukaemia, lung carcinoma
CC and erythroleukemia, can be identified by testing for expression of
CC PDGF-C. PDGF-C antagonists can also be used to inhibit tissue
CC remodelling during invasion of tumour cells into a normal population of
CC cells. Antagonists can also be used to treat fibrotic conditions,
CC especially found in the lung, kidney or liver.
XX
SQ Sequence 318 AA;

Query Match 100.0%; Score 754; DB 21; Length 318;
Best Local Similarity 100.0%; Pred. No. 4.3e-71;
Matches 136; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

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Qy       1 LDLEDLYRPTWQLLGKAFVFGRKSRVVDLNLLTEEVRLYSCTPRNFSVSIREELKRTDTI 60
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Db     183 ldledlyrptwqllgkafvfgrksrvvdlnllteevrlysctprnfsvsireelkrtdti 242

Qy      61 FWPGCLLVKRCGGNCACCLHNCNECQCVPSKVTKKYHEVLQLRPKTGVRGLHKSLTDVAL 120
          ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db     243 fwpgcllvkrcggncacclhncnecqcvpskvtkkyhevlqlrpktgvrglhksltdval 302

Qy     121 EHHEECDCVCRGSTGG 136
          ||||||||||||||||
Db     303 ehheecdcvcrgstgg 318
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RESULT 2
AAB58438
ID AAB58438 standard; Protein; 339 AA.
XX
AC AAB58438;
XX
DT 14-MAR-2001 (first entry)
XX
DE Lung cancer associated polypeptide sequence SEQ ID 776.
XX
KW Human; lung cancer associated protein; neuroprotective; cytostatic;
KW cardioactive; immunomodulatory; muscular active; vulnerary;
KW gastrointestinal; nephrotropic; antiinfective; gynecological;
KW antibacterial; diagnosis; neural disorder; immune disorder; reproductive;
KW proliferative disorder; wound healing; infectious disease.
XX
OS Homo sapiens.
XX
PN WO200055180-A2.
XX
PD 21-SEP-2000.
XX
PF 08-MAR-2000; 2000WO-US05918.
XX
PR 12-MAR-1999; 99US-0124270.
XX
PA (HUMA-) HUMAN GENOME SCI INC.
PA (ROSE/) ROSEN C A.
XX
PI Ruben SM;
XX
DR WPI; 2000-587514/55.
DR N-PSDB; AAF18314.
XX
PT Lung cancer associated gene sequences, referred to as lung cancer
PT antigens, useful for treatment, prevention, and diagnosis of disorders
PT such as lung cancer -
XX
PS Claim 11; Page 1305-1306; 1425pp; English.
XX
CC Polynucleotide sequences AAF17982 - AAF18424 encode human lung cancer
CC associated proteins represented in AAB58106 - AAB58548. Lung cancer
CC associated proteins and polynucleotide sequences, their agonists, and
CC antagonists may have neuroprotective; cytostatic; cardioactive;
CC immunomodulatory; muscular active general; vulnerary; gastrointestinal
CC general; nephrotropic; antiinfective; gynecological; or antibacterial
CC activity. The invention also includes antibodies specific for the
CC protein or polynucleotide sequences. The lung cancer associated
CC polynucleotide sequences may be used for detection of lung cancer,
CC chromosome identification, as chromosome markers, and for numerous other
CC diagnostic or research purposes. The proteins may be used to treat
CC disorders such as neural, immune, muscular, reproductive,
CC gastrointestinal, pulmonary, cardiovascular, renal, and proliferative
CC disorders. The proteins may also be used in the treatment of wounds and
CC infectious diseases. Polynucleotide sequences AAF18425 - AAF18433 and
CC peptide AAB58549 are used in the course of the invention for the
CC identification and characterisation of the polynucleotide and protein
CC sequences.
XX
SQ Sequence 339 AA;

Query Match 100.0%; Score 754; DB 21; Length 339;
Best Local Similarity 100.0%; Pred. No. 4.6e-71;
Matches 136; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

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Db     204 ldledlyrptwqllgkafvfgrksrvvdlnllteevrlysctprnfsvsireelkrtdti 263

Qy      61 FWPGCLLVKRCGGNCACCLHNCNECQCVPSKVTKKYHEVLQLRPKTGVRGLHKSLTDVAL 120
          ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db     264 fwpgcllvkrcggncacclhncnecqcvpskvtkkyhevlqlrpktgvrglhksltdval 323

Qy     121 EHHEECDCVCRGSTGG 136
          ||||||||||||||||
Db     324 ehheecdcvcrgstgg 339
```

RESULT 3
AAY33679
ID AAY33679 standard; Protein; 345 AA.
XX
AC AAY33679;
XX
DT 11-JAN-2000 (first entry)
XX
DE Human VEGF-E protein.
XX

KW VEGF-E; human; vascular endothelial cell growth factor; wound repair;
KW treatment; cardiovascular disorder; endothelial disorder; therapy;
KW tissue generation; regeneration; cardiac hypertrophy; cancer; detection;
KW angiogenic disorder; age-related macular degeneration; vascular disease;
KW neovascularization; tumor; gene mapping.
XX
OS Homo sapiens.
XX
PN WO9947677-A2.
XX
PD 23-SEP-1999.
XX
PF 10-MAR-1999; 99WO-US05190.
XX
PR 17-MAR-1998; 98US-0040220.
PR 02-NOV-1998; 98US-0184216.
XX
PA (GETH) GENENTECH INC.
XX
PI Ferrara N, Kuo SS;
XX
DR WPI; 1999-580306/49.
DR N-PSDB; AAZ23691.
XX
PT New growth factor polypeptide useful for treating cardiovascular or
PT endothelial disorders, e.g. cardiac hypertrophy -
XX
PS Claim 1; Fig 2; 122pp; English.
XX
CC This invention describes the isolation of a novel human vascular
CC endothelial cell growth factor-E (VEGF-E) polypeptide which has
CC tranquillizer, vulnery and cardiant activity. VEGF-E can be administered
CC therapeutically, especially by expressing encoding polynucleotides, to
CC treat cardiovascular or endothelial disorders in mammals, especially
CC humans. It is useful in wound repair and tissue generation and
CC regeneration, and may especially be used to treat cardiac hypertrophy
CC It can be combined with a carrier in pharmaceutical compositions, which
CC can be administered to treat disorders as above. VEGF-E can be used to
CC screen for antagonists and agonists, and the antagonists administered to
CC treat angiogenic disorders in mammals (especially humans) e.g. cancer or
CC age-related macular degeneration. It can be used to generate antibodies,
CC useful therapeutically as antagonists, as above. The antibodies are also
CC useful to detect VEGF-E polypeptide, especially to diagnose
CC cardiovascular, endothelial or angiogenic disorders in mammals (e.g.
CC vascular disease, or neovascularization associated with tumor formation),
CC by contacting the antibody with a tissue sample and detecting formation
CC of an antibody-VEGF-E polypeptide complex. Polynucleotides encoding
CC VEGF-E can be used to diagnose cardiovascular and endothelial disorders
CC in mammals, by detecting abnormally high or low VEGF-E gene expression in
CC tissue samples. They can also be used to diagnose a disease or
CC susceptibility to a disease related to a mutated form of VEGF-E (e.g. a
CC cardiovascular, endothelial or angiogenic disorder such as a tumor), by
CC detecting a mutation in the VEGF-E-encoding sequence isolated from a
CC sample. They may also be used to produce probes useful to detect related
CC sequences or for gene mapping. This sequence represents the human VEGF-E
CC protein described in the method of the invention.
XX
SQ Sequence 345 AA;

Query Match 100.0%; Score 754; DB 20; Length 345;
Best Local Similarity 100.0%; Pred. No. 4.7e-71;
Matches 136; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

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Db     210 ldledlyrptwqllgkafvfgrksrvvdlnllteevrlysctprnfsvsireelkrtdti 269

Qy      61 FWPGCLLVKRCGGNCACCLHNCNECQCVPSKVTKKYHEVLQLRPKTGVRGLHKSLTDVAL 120
          ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db     270 fwpgcllvkrcggncacclhncnecqcvpskvtkkyhevlqlrpktgvrglhksltdval 329

Qy     121 EHHEECDCVCRGSTGG 136
```

```
          ||||||||||||||||
Db     330 ehheecdcvcrgstgg 345
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RESULT 4
AAY41766
ID AAY41766 standard; Protein; 345 AA.
XX
AC AAY41766;
XX
DT 07-DEC-1999 (first entry)
XX
DE Human PRO200 protein sequence.
XX
KW Human; PRO; EST; expressed sequence tag; PCR primer; hybridisation;
KW probe; blood coagulation disorder; cancer; cellular adhesion disorder;
KW secreted protein; transmembrane protein.
XX
OS Homo sapiens.
XX
PN WO9946281-A2.
XX
PD 16-SEP-1999.
XX
PF 08-MAR-1999; 99WO-US05028.
XX
PR 10-MAR-1998; 98US-0077450.
PR 11-MAR-1998; 98US-0077632.
PR 11-MAR-1998; 98US-0077641.
PR 11-MAR-1998; 98US-0077649.
PR 12-MAR-1998; 98US-0077791.
PR 13-MAR-1998; 98US-0078004.
PR 17-MAR-1998; 98US-0040220.
PR 20-MAR-1998; 98US-0078886.
PR 20-MAR-1998; 98US-0078910.
PR 20-MAR-1998; 98US-0078936.
PR 20-MAR-1998; 98US-0078939.
PR 25-MAR-1998; 98US-0079294.
PR 26-MAR-1998; 98US-0079656.
PR 27-MAR-1998; 98US-0079663.
PR 27-MAR-1998; 98US-0079664.
PR 27-MAR-1998; 98US-0079689.
PR 27-MAR-1998; 98US-0079728.
PR 27-MAR-1998; 98US-0079786.
PR 30-MAR-1998; 98US-0079920.
PR 30-MAR-1998; 98US-0079923.
PR 31-MAR-1998; 98US-0080105.
PR 31-MAR-1998; 98US-0080107.
PR 31-MAR-1998; 98US-0080165.
PR 31-MAR-1998; 98US-0080194.
PR 01-APR-1998; 98US-0080327.
PR 01-APR-1998; 98US-0080328.
PR 01-APR-1998; 98US-0080333.
PR 01-APR-1998; 98US-0080334.
PR 08-APR-1998; 98US-0081049.
PR 08-APR-1998; 98US-0081070.
PR 08-APR-1998; 98US-0081071.
PR 09-APR-1998; 98US-0081195.
PR 09-APR-1998; 98US-0081203.
PR 09-APR-1998; 98US-0081229.
PR 15-APR-1998; 98US-0081817.
PR 15-APR-1998; 98US-0081838.
PR 15-APR-1998; 98US-0081952.
PR 15-APR-1998; 98US-0081955.
PR 21-APR-1998; 98US-0082568.
PR 21-APR-1998; 98US-0082569.
PR 22-APR-1998; 98US-0082700.
PR 22-APR-1998; 98US-0082704.
PR 22-APR-1998; 98US-0082804.
PR 23-APR-1998; 98US-0082767.
PR 23-APR-1998; 98US-0082796.
PR 27-APR-1998; 98US-0083336.
PR 28-APR-1998; 98US-0083322.

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PR   29-APR-1998;   98US-0083392.
PR   29-APR-1998;   98US-0083495.
PR   29-APR-1998;   98US-0083496.
PR   29-APR-1998;   98US-0083499.
PR   29-APR-1998;   98US-0083500.
PR   29-APR-1998;   98US-0083545.
PR   29-APR-1998;   98US-0083554.
PR   29-APR-1998;   98US-0083558.
PR   29-APR-1998;   98US-0083559.
PR   30-APR-1998;   98US-0083742.
PR   05-MAY-1998;   98US-0084366.
PR   06-MAY-1998;   98US-0084414.
PR   06-MAY-1998;   98US-0084441.
PR   07-MAY-1998;   98US-0084598.
PR   07-MAY-1998;   98US-0084600.
PR   07-MAY-1998;   98US-0084627.
PR   07-MAY-1998;   98US-0084637.
PR   07-MAY-1998;   98US-0084639.
PR   07-MAY-1998;   98US-0084640.
PR   07-MAY-1998;   98US-0084643.
PR   13-MAY-1998;   98US-0085323.
PR   13-MAY-1998;   98US-0085338.
PR   13-MAY-1998;   98US-0085339.
PR   15-MAY-1998;   98US-0085573.
PR   15-MAY-1998;   98US-0085579.
PR   15-MAY-1998;   98US-0085580.
PR   15-MAY-1998;   98US-0085582.
PR   15-MAY-1998;   98US-0085689.
PR   15-MAY-1998;   98US-0085697.
PR   15-MAY-1998;   98US-0085700.
PR   15-MAY-1998;   98US-0085704.
PR   18-MAY-1998;   98US-0086023.
PR   22-MAY-1998;   98US-0086392.
PR   22-MAY-1998;   98US-0086414.
PR   22-MAY-1998;   98US-0086430.
PR   22-MAY-1998;   98US-0086486.
PR   28-MAY-1998;   98US-0087098.
PR   28-MAY-1998;   98US-0087106.
PR   28-MAY-1998;   98US-0087208.
PR   30-JUL-1998;   98US-0094651.
PR   11-SEP-1998;   98US-0100038.
XX
PA   (GETH ) GENENTECH INC.
XX
PI   Wood WI,  Goddard A,  Gurney A,  Yuan J,  Baker KP,  Chen J;
XX
DR   WPI; 1999-551358/46.
DR   N-PSDB; AAZ34296.
XX
PT   New secreted and transmembrane polypeptides and their polynucleotides,
PT   useful for treating blood coagulation disorders, cancers and cellular
PT   adhesion disorders -
XX
PS   Claim 12; Fig 207; 530pp; English.
XX
CC   The present invention describes secreted and transmembrane polypeptides
CC   and their polynucleotides. The nucleotide sequences are useful as
CC   sources of probes, primers, for chromosome mapping, and for generation
CC   of antisense sequences. They can also be used to create transgenic
CC   animals. The proteins can be used to treat a variety of diseases and
CC   disorders, depending on their function. Diseases that may be treated
CC   include blood coagulation disorders, cancers and cellular adhesion
CC   disorders. They may also be used to raise antibodies. AAZ33891 to
CC   AAZ34338, and AAY41685 to AAY41774 represent polynucleotide and
CC   polypeptide sequence given in the exemplification of the present
CC   invention.
XX
SQ   Sequence   345 AA;

  Query Match             100.0%;  Score 754;  DB 20;  Length 345;
  Best Local Similarity   100.0%;  Pred. No. 4.7e-71;
  Matches  136;  Conservative    0;  Mismatches    0;  Indels    0;  Gaps    0;

Qy       1 LDLEDLYRPTWQLLGKAFVFGRKSRVVDLNLLTEEVRLYSCTPRNFSVSIREELKRTDTI 60
           ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db     210 ldledlyrptwqllgkafvfgrksrvvdlnllteevrlysctprnfsvsireelkrtdti 269

Qy      61 FWPGCLLVKRCGGNCACCLHNCNECQCVPSKVTKKYHEVLQLRPKTGVRGLHKSLTDVAL 120
           ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db     270 fwpgcllvkrcggncacclhncnecqcvpskvtkkyhevlqlrpktgvrglhksltdval 329

Qy     121 EHHEECDCVCRGSTGG 136
           ||||||||||||||||
Db     330 ehheecdcvcrgstgg 345


RESULT   5
AAY30023
ID   AAY30023 standard; Protein; 345 AA.
XX
AC   AAY30023;
XX
DT   11-OCT-1999  (first entry)
XX
DE   Human vascular endothelial growth factor related protein.
XX
KW   Vascular endothelial growth factor related protein; VEGF-R protein;
KW   tissue growth inhibition; tumour growth; cancer; tissue growth;
KW   angiogenesis; coronary artery blockage.
XX
OS   Homo sapiens.
XX
PN   WO9937671-A1.
XX
PD   29-JUL-1999.
XX
PF   26-JAN-1999;   99WO-US01574.
XX
PR   31-AUG-1998;   98US-0098548.
PR   27-JAN-1998;   98US-0072635.
PR   05-JUN-1998;   98US-0088089.
PR   24-JUN-1998;   98US-0090544.
XX
PA   (ELIL ) LILLY & CO ELI.
XX
PI   Dou S,  Na S,  Song HY;
XX
DR   WPI; 1999-458680/38.
DR   N-PSDB; AAX86352.
XX
PT   A vascular endothelial growth factor related protein and related
PT   polynucleotide, useful for identifying antagonists and binding
PT   compounds
XX
PS   Claim 1; Page 56-58; 62pp; English.
XX
CC   The present sequence represents a vascular endothelial growth factor
CC   related (VEGF-R) protein. VEGF-R can be used in assays to identify
CC   compounds that bind to it or that antagonize its activity. VEGF-R
CC   antagonists (e.g. anti-VEGF-R antibodies) are useful for inhibiting
CC   tissue growth. This is useful for inhibiting tumour growth and for
CC   treating cancer. VEGF-R itself can be used to stimulate tissue
CC   growth, angiogenesis and to treat coronary artery blockage. The
CC   VEGF-R coding sequence can be used for the recombinant production of
CC   the VEGF-R protein.
XX
SQ   Sequence   345 AA;

  Query Match             100.0%;  Score 754;  DB 20;  Length 345;
  Best Local Similarity   100.0%;  Pred. No. 4.7e-71;
  Matches  136;  Conservative    0;  Mismatches    0;  Indels    0;  Gaps    0;

Qy       1 LDLEDLYRPTWQLLGKAFVFGRKSRVVDLNLLTEEVRLYSCTPRNFSVSIREELKRTDTI 60
           ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
```

```
Db    210 ldledlyrptwqllgkafvfgrksrvvdlnllteevrlysctprnfsvsireelkrtdti 269

Qy     61 FWPGCLLVKRCGGNCACCLHNCNECQCVPSKVTKKYHEVLQLRPKTGVRGLHKSLTDVAL 120
          ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db    270 fwpgcllvkrcggncacclhncnecqcvpskvtkkyhevlqlrpktgvrglhksltdval 329

Qy    121 EHHEECDCVCRGSTGG 136
          ||||||||||||||||
Db    330 ehheecdcvcrgstgg 345


RESULT   6
AAB48657
ID   AAB48657 standard; Protein; 345 AA.
XX
AC   AAB48657;
XX
DT   09-MAR-2001  (first entry)
XX
DE   Human zvegf3, SEQ ID NO:33.
XX
KW   Human; zvegf3; zvegf4 fusion; growth factor homologue; VEGF/PDGF family;
KW   CUB domain; PDGF-like activity; mitogenic; osteogenic;
KW   neovascularisation; tissue repair; proliferation; differentiation;
KW   liver damage; neuroregenerative; Alzheimer's disease; multiple sclerosis;
KW   periodontal disease; bone fracture; wound healing; vulnerary; ischaemia;
KW   immunomodulation; hepatic.
XX
OS   Homo sapiens.
XX
PN   WO200066736-A1.
XX
PD   09-NOV-2000.
XX
PF   03-MAY-2000; 2000WO-US40047.
XX
PR   03-MAY-1999;   99US-0304216.
PR   10-NOV-1999;   99US-0164463.
PR   04-FEB-2000; 2000US-0180169.
XX
PA   (ZYMO ) ZYMOGENETICS INC.
XX
PI   Gilbert T,  Hart CE,  Sheppard PO,  Gilbertson DG;
XX
DR   WPI; 2000-687541/67.
DR   N-PSDB; AAC81582.
XX
PT   Growth factor homologs and the nucleic acids that encode them, useful
PT   e.g. for treating liver damage, ischemia, multiple sclerosis and
PT   Alzheimer's disease -
XX
PS   Claim 48; Page 125-126; 143pp; English.
XX
CC   The invention relates to the human growth factor homologue zvegf4
CC   (AAB48653), and nucleic acids encoding it (AAC81555). Zvegf4 is a member
CC   of the PDGF (platelet-derived growth factor)/VEGF (vascular endothelial
CC   growth factor) family. Zvegf4 has a growth factor domain (AAB48654)
CC   characterised by a PDGF cystine knot structure, and a CUB domain
CC   (AAB48655) which has a beta barrel structure. Zvegf4 has PDGF-like
CC   activity, having mitogenic activity on fibroblasts, vascular smooth
CC   muscle cells and pericytes, and has also been shown to stimulate bone
CC   growth. The invention also relates to fusion proteins comprising human
CC   zvegf4 or fragments thereof, particularly human zvegf4/human zvegf3
CC   fusions; expression constructs and host cells comprising human zvegf4
CC   nucleic acids; the recombinant expression of human zvegf4; an antibody
CC   which binds to human zvegf4 or a fragment thereof; a method of activating
CC   a cell-surface PDGF receptor using a zvegf4-derived polypeptide; a
CC   method of modulating the proliferation, differentiation, migration or
CC   metabolism of bone cells, comprising exposing bone cells to
CC   zvegf4-derived polypeptides; and a method of detecting a genetic
CC   abnormality in the zvegf4 gene of a patient. Zvegf4 proteins and derived
CC   fragments may be used to stimulate tissue development or repair, or
CC   cellular differentiation or proliferation. They are particularly used for
CC   the treatment or repair of liver damage, and may also be used to
CC   modulate neurite growth (e.g., in the treatment of Alzheimer's disease or
CC   multiple sclerosis). Due to their osteogenic activity, they may be used
CC   in the treatment of periodontal disease and fractures. They may also be
CC   used to enhance expansion and mobilisation of haematopoietic stem cells
CC   and endothelial precursor stem cells, which may be useful in the
CC   treatment of ischaemia, in wound healing, and in the modulation of the
CC   immune system. The present sequence represents human zvegf3.
XX
SQ   Sequence   345 AA;


  Query Match             100.0%;  Score 754;  DB 21;  Length 345;
  Best Local Similarity   100.0%;  Pred. No. 4.7e-71;
  Matches  136;  Conservative    0;  Mismatches    0;  Indels    0;  Gaps    0;

Qy       1 LDLEDLYRPTWQLLGKAFVFGRKSRVVDLNLLTEEVRLYSCTPRNFSVSIREELKRTDTI 60
           ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db     210 ldledlyrptwqllgkafvfgrksrvvdlnllteevrlysctprnfsvsireelkrtdti 269

Qy      61 FWPGCLLVKRCGGNCACCLHNCNECQCVPSKVTKKYHEVLQLRPKTGVRGLHKSLTDVAL 120
           ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db     270 fwpgcllvkrcggncacclhncnecqcvpskvtkkyhevlqlrpktgvrglhksltdval 329

Qy     121 EHHEECDCVCRGSTGG 136
           ||||||||||||||||
Db     330 ehheecdcvcrgstgg 345


RESULT   7
AAB24250
ID   AAB24250 standard; Protein; 345 AA.
XX
AC   AAB24250;
XX
DT   08-FEB-2001  (first entry)
XX
DE   Human platelet-derived growth factor related protein LP8.
XX
KW   Human; platelet derived growth factor related protein; LP8; VEGFh;
KW   vascular endothelial growth factor h; tissue regeneration; vulnerary;
KW   atherosclerosis; PDGF-related protein; antiarteriosclerotic.
XX
OS   Homo sapiens.
XX
PN   WO200059940-A2.
XX
PD   12-OCT-2000.
XX
PF   24-MAR-2000; 2000WO-US06427.
XX
PR   06-APR-1999;   99US-0127913.
XX
PA   (ELIL ) LILLY & CO ELI.
XX
PI   Hammond LJ,  Na S;
XX
DR   WPI; 2000-664991/64.
DR   N-PSDB; AAC64426.
XX
PT   Enhancing tissue growth and promoting wound healing by administering
PT   platelet-derived growth factor related protein, LP8 or its analog and
PT   treating atherosclerosis by administering LP8 antagonist  -
XX
PS   Claim 4; Page 63-64; 64pp; English.
XX
CC   The present invention describes a method for enhancing tissue growth,
CC   promoting wound healing or stimulating smooth muscle growth by
CC   administering a platelet-derived growth factor (PDGF) related protein,
CC   designated LP8 or its analogue. Also described is a method of slowing
CC   the progress of atherosclerosis or treating atherosclerosis comprising
CC   the administration of an LP8 antagonist. The method is useful for
CC   enhancing tissue growth, promoting wound healing and stimulating smooth
```

```
CC   muscle growth. Antagonists of LP8 are useful for treating
CC   atherosclerosis. The present sequence represents human LP8, which is
CC   also called VEGFh.
XX
SQ   Sequence   345 AA;


  Query Match             100.0%;  Score 754;  DB 21;  Length 345;
  Best Local Similarity   100.0%;  Pred. No. 4.7e-71;
  Matches  136;  Conservative    0;  Mismatches    0;  Indels    0;  Gaps    0;

Qy       1 LDLEDLYRPTWQLLGKAFVFGRKSRVVDLNLLTEEVRLYSCTPRNFSVSIREELKRTDTI 60
           ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db     210 ldledlyrptwqllgkafvfgrksrvvdlnllteevrlysctprnfsvsireelkrtdti 269

Qy      61 FWPGCLLVKRCGGNCACCLHNCNECQCVPSKVTKKYHEVLQLRPKTGVRGLHKSLTDVAL 120
           ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db     270 fwpgcllvkrcggncacclhncnecqcvpskvtkkyhevlqlrpktgvrglhksltdval 329

Qy     121 EHHEECDCVCRGSTGG 136
           ||||||||||||||||
Db     330 ehheecdcvcrgstgg 345


RESULT   8
AAB44322
ID   AAB44322 standard; Protein; 345 AA.
XX
AC   AAB44322;
XX
DT   08-FEB-2001  (first entry)
XX
DE   Human PRO200 (UNQ174) protein sequence SEQ ID NO:488.
XX
KW   Human; secreted protein; transmembrane protein; PRO; EST; cytostatic;
KW   expressed sequence tag; detection; cancer.
XX
OS   Homo sapiens.
XX
PN   WO200053756-A2.
XX
PD   14-SEP-2000.
XX
PF   18-FEB-2000; 2000WO-US04341.
XX
PR   08-MAR-1999;   99WO-US05028.
PR   12-MAR-1999;   99US-0123957.
PR   29-MAR-1999;   99US-0126773.
PR   21-APR-1999;   99US-0130232.
PR   28-APR-1999;   99US-0131445.
PR   14-MAY-1999;   99US-0134287.
PR   23-JUN-1999;   99US-0141037.
PR   26-JUL-1999;   99US-0145698.
PR   29-OCT-1999;   99US-0162506.
PR   30-NOV-1999;   99WO-US28313.
PR   02-DEC-1999;   99WO-US28551.
PR   02-DEC-1999;   99WO-US28565.
PR   16-DEC-1999;   99WO-US30095.
PR   30-DEC-1999;   99WO-US31243.
PR   30-DEC-1999;   99WO-US31274.
PR   05-JAN-2000; 2000WO-US00219.
PR   06-JAN-2000; 2000WO-US00277.
PR   06-JAN-2000; 2000WO-US00376.
XX
PA   (GETH ) GENENTECH INC.
XX
PI   Ashkenazi AJ,  Baker KP,  Botstein D,  Desnoyers L,  Eaton DL;
PI   Ferrara N,  Filvaroff E,  Fong S,  Gao W,  Gerber H,  Gerritsen ME;
PI   Goddard A,  Godowski PJ,  Grimaldi CJ,  Gurney AL,  Hillan KJ;
PI   Kljavin IJ,  Kuo SS,  Napier MA,  Pan J,  Paoni NF,  Roy MA;
PI   Shelton DL,  Stewart TA,  Tumas D,  Williams PM,  Wood WI;
XX
DR   WPI; 2000-611443/58.
DR   N-PSDB; AAC78582.
XX
PT   Novel PRO polypeptides and polynucleotides used in detection methods,
PT   to target bioactive molecules to specific cells, and to modulate
PT   cellular activities -
XX
PS   Claim 12; Fig 207; 636pp; English.
XX
CC   AAC78458 to AAC78599 represent polynucleotide and EST (expressed
CC   sequence tag) sequences which encode secreted or transmembrane PRO
CC   polypeptides. The PRO polynucleotides and polypeptides have cytostatic
CC   activity. The polynucleotides and polypeptides can be used for detecting
CC   the presence of PRO polypeptides in samples, for linking bioactive
CC   molecules to cells and for modulating biological activities of cells,
CC   using the polypeptides for specific targeting. The polypeptide targeting
CC   can be used to kill the target cells, e.g. for the treatment of cancers.
CC   The polypeptide pairs provide specific targeting of bioactive molecules
CC   to cells. AAC78600 to AAC78987 represent PCR primers and probes used in
CC   the isolation of the PRO polynucleotide sequences.
XX
SQ   Sequence   345 AA;


  Query Match             100.0%;  Score 754;  DB 21;  Length 345;
  Best Local Similarity   100.0%;  Pred. No. 4.7e-71;
  Matches  136;  Conservative    0;  Mismatches    0;  Indels    0;  Gaps    0;

Qy       1 LDLEDLYRPTWQLLGKAFVFGRKSRVVDLNLLTEEVRLYSCTPRNFSVSIREELKRTDTI 60
           ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db     210 ldledlyrptwqllgkafvfgrksrvvdlnllteevrlysctprnfsvsireelkrtdti 269

Qy      61 FWPGCLLVKRCGGNCACCLHNCNECQCVPSKVTKKYHEVLQLRPKTGVRGLHKSLTDVAL 120
           ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db     270 fwpgcllvkrcggncacclhncnecqcvpskvtkkyhevlqlrpktgvrglhksltdval 329

Qy     121 EHHEECDCVCRGSTGG 136
           ||||||||||||||||
Db     330 ehheecdcvcrgstgg 345


RESULT   9
AAB10633
ID   AAB10633 standard; Protein; 345 AA.
XX
AC   AAB10633;
XX
DT   19-JAN-2001  (first entry)
XX
DE   Human RACE generated VEGF-X protein.
XX
KW   VEGF-X; vascular endothelial growth factor; human; vulnerary; cytostatic;
KW   antirheumatic; antiarthritic; antipsoriatic; antidiabetic; treatment;
KW   angiogenesis regulator; vascularization regulator; cancer; psoriasis;
KW   rheumatoid arthritis; diabetic retinopathy; blood vessel; organ repair;
KW   tissue regeneration; tissue repair; wound; dermal ulcer; pressure sore;
KW   venous sore; diabetic ulcer; burns; skin graft growth.
XX
OS   Homo sapiens.
XX
PN   WO200037641-A2.
XX
PD   29-JUN-2000.
XX
PF   21-DEC-1999;   99WO-US30503.
XX
PR   22-DEC-1998;   98GB-0028377.
PR   18-MAR-1999;   99US-0124967.
PR   08-NOV-1999;   99US-0164131.
XX
PA   (JANC ) JANSSEN PHARM NV.
XX
PI   Gordon RD,  Sprengel JJ,  Yon JR,  Dijkmans JJH,  Gosiewska A;
PI   Dhanaraj SN,  Xu J;
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XX
DR   WPI; 2000-442669/38.
DR   N-PSDB; AAA71951.
XX
PT   New vascular endothelial growth factor protein, useful for treating or
PT   preventing diseases associated with inappropriate angiogenesis activity
PT   such as cancer, rheumatoid arthritis, psoriasis and wounds -
XX
PS   Disclosure; Fig 6; 127pp; English.
XX
CC   This invention describes a novel vascular endothelial growth factor-X
CC   (VEGF-X) protein (Ia) and its encoding polynucleotide (IIa) which has
CC   vulnerary, cytostatic, antirheumatic, antiarthritic, antipsoriatic and
CC   antidiabetic activity and acts as an angiogenesis and vascularization
CC   regulator. An antisense molecule of the invention is useful for treating
CC   or preventing cancer, rheumatoid arthritis, psoriasis and diabetic
CC   retinopathy by inhibiting angiogenic activity or inappropriate
CC   vascularization including formation and proliferation of new blood
CC   vessels, growth and development of tissues, tissue regeneration and organ
CC   and tissue repair in a subject. The products of the invention are useful
CC   for preparing medicaments for treating wounds such as dermal ulcers,
CC   pressure sores, venous sores, diabetic ulcers and burns and to promote
CC   skin graft growth, tissue repair, proliferation of new blood vessels,
CC   tissue regeneration and organ repair by promoting angiogenic activity or
CC   vascularization. This sequence represents the RACE generated human VEGF-X
CC   protein described in the method of the invention.
XX
SQ   Sequence   345 AA;


  Query Match             100.0%;  Score 754;  DB 21;  Length 345;
  Best Local Similarity   100.0%;  Pred. No. 4.7e-71;
  Matches  136;  Conservative    0;  Mismatches    0;  Indels    0;  Gaps    0;

Qy       1 LDLEDLYRPTWQLLGKAFVFGRKSRVVDLNLLTEEVRLYSCTPRNFSVSIREELKRTDTI 60
          ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db     210 ldledlyrptwqllgkafvfgrksrvvdlnllteevrlysctprnfsvsireelkrtdti 269

Qy      61 FWPGCLLVKRCGGNCACCLHNCNECQCVPSKVTKKYHEVLQLRPKTGVRGLHKSLTDVAL 120
          ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db     270 fwpgcllvkrcggncacclhncnecqcvpskvtkkyhevlqlrpktgvrglhksltdval 329

Qy     121 EHHEECDCVCRGSTGG 136
          ||||||||||||||||
Db     330 ehheecdcvcrgstgg 345


RESULT  10
AAB10634
ID   AAB10634 standard; Protein; 345 AA.
XX
AC   AAB10634;
XX
DT   19-JAN-2001  (first entry)
XX
DE   Human VEGF-X homologue protein.
XX
KW   VEGF-X; vascular endothelial growth factor; human; vulnerary; cytostatic;
KW   antirheumatic; antiarthritic; antipsoriatic; antidiabetic; treatment;
KW   angiogenesis regulator; vascularization regulator; cancer; psoriasis;
KW   rheumatoid arthritis; diabetic retinopathy; blood vessel; organ repair;
KW   tissue regeneration; tissue repair; wound; dermal ulcer; pressure sore;
KW   venous sore; diabetic ulcer; burns; skin graft growth.
XX
OS   Homo sapiens.
XX
PN   WO200037641-A2.
XX
PD   29-JUN-2000.
XX
PF   21-DEC-1999;   99WO-US30503.
XX
PR   22-DEC-1998;   98GB-0028377.
PR   18-MAR-1999;   99US-0124967.
PR   08-NOV-1999;   99US-0164131.
XX
PA   (JANC ) JANSSEN PHARM NV.
XX
PI   Gordon RD,  Sprengel JJ,  Yon JR,  Dijkmans JJH,  Gosiewska A;
PI   Dhanaraj SN,  Xu J;
XX
DR   WPI; 2000-442669/38.
DR   N-PSDB; AAA71952.
XX
PT   New vascular endothelial growth factor protein, useful for treating or
PT   preventing diseases associated with inappropriate angiogenesis activity
PT   such as cancer, rheumatoid arthritis, psoriasis and wounds -
XX
PS   Disclosure; Fig 7; 127pp; English.
XX
CC   This invention describes a novel vascular endothelial growth factor-X
CC   (VEGF-X) protein (Ia) and its encoding polynucleotide (IIa) which has
CC   vulnerary, cytostatic, antirheumatic, antiarthritic, antipsoriatic and
CC   antidiabetic activity and acts as an angiogenesis and vascularization
CC   regulator. An antisense molecule of the invention is useful for treating
CC   or preventing cancer, rheumatoid arthritis, psoriasis and diabetic
CC   retinopathy by inhibiting angiogenic activity or inappropriate
CC   vascularization including formation and proliferation of new blood
CC   vessels, growth and development of tissues, tissue regeneration and organ
CC   and tissue repair in a subject. The products of the invention are useful
CC   for preparing medicaments for treating wounds such as dermal ulcers,
CC   pressure sores, venous sores, diabetic ulcers and burns and to promote
CC   skin graft growth, tissue repair, proliferation of new blood vessels,
CC   tissue regeneration and organ repair by promoting angiogenic activity or
CC   vascularization. This sequence represents the human VEGF-X protein
CC   homologue described in the method of the invention.
XX
SQ   Sequence   345 AA;


  Query Match             100.0%;  Score 754;  DB 21;  Length 345;
  Best Local Similarity   100.0%;  Pred. No. 4.7e-71;
  Matches  136;  Conservative    0;  Mismatches    0;  Indels    0;  Gaps    0;

Qy       1 LDLEDLYRPTWQLLGKAFVFGRKSRVVDLNLLTEEVRLYSCTPRNFSVSIREELKRTDTI 60
          ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db     210 ldledlyrptwqllgkafvfgrksrvvdlnllteevrlysctprnfsvsireelkrtdti 269

Qy      61 FWPGCLLVKRCGGNCACCLHNCNECQCVPSKVTKKYHEVLQLRPKTGVRGLHKSLTDVAL 120
          ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db     270 fwpgcllvkrcggncacclhncnecqcvpskvtkkyhevlqlrpktgvrglhksltdval 329

Qy     121 EHHEECDCVCRGSTGG 136
          ||||||||||||||||
Db     330 ehheecdcvcrgstgg 345


RESULT  11
AAB10635
ID   AAB10635 standard; Protein; 345 AA.
XX
AC   AAB10635;
XX
DT   19-JAN-2001  (first entry)
XX
DE   Human VEGF-X protein #1 isolated from clones 4 and 7.
XX
KW   VEGF-X; vascular endothelial growth factor; human; vulnerary; cytostatic;
KW   antirheumatic; antiarthritic; antipsoriatic; antidiabetic; treatment;
KW   angiogenesis regulator; vascularization regulator; cancer; psoriasis;
KW   rheumatoid arthritis; diabetic retinopathy; blood vessel; organ repair;
KW   tissue regeneration; tissue repair; wound; dermal ulcer; pressure sore;
KW   venous sore; diabetic ulcer; burns; skin graft growth.
XX
OS   Homo sapiens.
XX
```

PN WO200037641-A2.
XX
PD 29-JUN-2000.
XX
PF 21-DEC-1999; 99WO-US30503.
XX
PR 22-DEC-1998; 98GB-0028377.
PR 18-MAR-1999; 99US-0124967.
PR 08-NOV-1999; 99US-0164131.
XX
PA (JANC) JANSSEN PHARM NV.
XX
PI Gordon RD, Sprengel JJ, Yon JR, Dijkmans JJH, Gosiewska A;
PI Dhanaraj SN, Xu J;
XX
DR WPI; 2000-442669/38.
DR N-PSDB; AAA71955.
XX
PT New vascular endothelial growth factor protein, useful for treating or
PT preventing diseases associated with inappropriate angiogenesis activity
PT such as cancer, rheumatoid arthritis, psoriasis and wounds -
XX
PS Disclosure; Fig 9; 127pp; English.
XX
CC This invention describes a novel vascular endothelial growth factor-X
CC (VEGF-X) protein (Ia) and its encoding polynucleotide (IIa) which has
CC vulnerary, cytostatic, antirheumatic, antiarthritic, antipsoriatic and
CC antidiabetic activity and acts as an angiogenesis and vascularization
CC regulator. An antisense molecule of the invention is useful for treating
CC or preventing cancer, rheumatoid arthritis, psoriasis and diabetic
CC retinopathy by inhibiting angiogenic activity or inappropriate
CC vascularization including formation and proliferation of new blood
CC vessels, growth and development of tissues, tissue regeneration and organ
CC and tissue repair in a subject. The products of the invention are useful
CC for preparing medicaments for treating wounds such as dermal ulcers,
CC pressure sores, venous sores, diabetic ulcers and burns and to promote
CC skin graft growth, tissue repair, proliferation of new blood vessels,
CC tissue regeneration and organ repair by promoting angiogenic activity or
CC vascularization. This sequence represents the human VEGF-X protein
CC isolated from clones 4 and 7 described in the method of the invention.
XX
SQ Sequence 345 AA;

Query Match 100.0%; Score 754; DB 21; Length 345;
Best Local Similarity 100.0%; Pred. No. 4.7e-71;
Matches 136; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

```
Qy       1 LDLEDLYRPTWQLLGKAFVFGRKSRVVDLNLLTEEVRLYSCTPRNFSVSIREELKRTDTI 60
          ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db     210 ldledlyrptwqllgkafvfgrksrvvdlnllteevrlysctprnfsvsireelkrtdti 269

Qy      61 FWPGCLLVKRCGGNCACCLHNCNECQCVPSKVTKKYHEVLQLRPKTGVRGLHKSLTDVAL 120
          ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db     270 fwpgcllvkrcggncacclhncnecqcvpskvtkkyhevlqlrpktgvrglhksltdval 329

Qy     121 EHHEECDCVCRGSTGG 136
          ||||||||||||||||
Db     330 ehheecdcvcrgstgg 345
```

RESULT 12
AAB10636
ID AAB10636 standard; Protein; 345 AA.
XX
AC AAB10636;
XX
DT 19-JAN-2001 (first entry)
XX
DE Human VEGF-X protein #2 isolated from clones 4 and 7.
XX
KW VEGF-X; vascular endothelial growth factor; human; vulnerary; cytostatic;
KW antirheumatic; antiarthritic; antipsoriatic; antidiabetic; treatment;
KW angiogenesis regulator; vascularization regulator; cancer; psoriasis;
KW rheumatoid arthritis; diabetic retinopathy; blood vessel; organ repair;
KW tissue regeneration; tissue repair; wound; dermal ulcer; pressure sore;
KW venous sore; diabetic ulcer; burns; skin graft growth.
XX
OS Homo sapiens.
XX
PN WO200037641-A2.
XX
PD 29-JUN-2000.
XX
PF 21-DEC-1999; 99WO-US30503.
XX
PR 22-DEC-1998; 98GB-0028377.
PR 18-MAR-1999; 99US-0124967.
PR 08-NOV-1999; 99US-0164131.
XX
PA (JANC) JANSSEN PHARM NV.
XX
PI Gordon RD, Sprengel JJ, Yon JR, Dijkmans JJH, Gosiewska A;
PI Dhanaraj SN, Xu J;
XX
DR WPI; 2000-442669/38.
DR N-PSDB; AAA71955.
XX
PT New vascular endothelial growth factor protein, useful for treating or
PT preventing diseases associated with inappropriate angiogenesis activity
PT such as cancer, rheumatoid arthritis, psoriasis and wounds -
XX
PS Claim 1; Fig 10; 127pp; English.
XX
CC This invention describes a novel vascular endothelial growth factor-X
CC (VEGF-X) protein (Ia) and its encoding polynucleotide (IIa) which has
CC vulnerary, cytostatic, antirheumatic, antiarthritic, antipsoriatic and
CC antidiabetic activity and acts as an angiogenesis and vascularization
CC regulator. An antisense molecule of the invention is useful for treating
CC or preventing cancer, rheumatoid arthritis, psoriasis and diabetic
CC retinopathy by inhibiting angiogenic activity or inappropriate
CC vascularization including formation and proliferation of new blood
CC vessels, growth and development of tissues, tissue regeneration and organ
CC and tissue repair in a subject. The products of the invention are useful
CC for preparing medicaments for treating wounds such as dermal ulcers,
CC pressure sores, venous sores, diabetic ulcers and burns and to promote
CC skin graft growth, tissue repair, proliferation of new blood vessels,
CC tissue regeneration and organ repair by promoting angiogenic activity or
CC vascularization. This sequence represents the human VEGF-X protein
CC isolated from clones 4 and 7 described in the method of the invention.
XX
SQ Sequence 345 AA;

Query Match 100.0%; Score 754; DB 21; Length 345;
Best Local Similarity 100.0%; Pred. No. 4.7e-71;
Matches 136; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

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Qy       1 LDLEDLYRPTWQLLGKAFVFGRKSRVVDLNLLTEEVRLYSCTPRNFSVSIREELKRTDTI 60
          ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db     210 ldledlyrptwqllgkafvfgrksrvvdlnllteevrlysctprnfsvsireelkrtdti 269

Qy      61 FWPGCLLVKRCGGNCACCLHNCNECQCVPSKVTKKYHEVLQLRPKTGVRGLHKSLTDVAL 120
          ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db     270 fwpgcllvkrcggncacclhncnecqcvpskvtkkyhevlqlrpktgvrglhksltdval 329

Qy     121 EHHEECDCVCRGSTGG 136
          ||||||||||||||||
Db     330 ehheecdcvcrgstgg 345
```

RESULT 13
AAB10644
ID AAB10644 standard; Protein; 345 AA.
XX
AC AAB10644;

```
XX
DT   19-JAN-2001  (first entry)
XX
DE   Human VEGF-X protein #4.
XX
KW   VEGF-X; vascular endothelial growth factor; human; vulnerary; cytostatic;
KW   antirheumatic; antiarthritic; antipsoriatic; antidiabetic; treatment;
KW   angiogenesis regulator; vascularization regulator; cancer; psoriasis;
KW   rheumatoid arthritis; diabetic retinopathy; blood vessel; organ repair;
KW   tissue regeneration; tissue repair; wound; dermal ulcer; pressure sore;
KW   venous sore; diabetic ulcer; burns; skin graft growth.
XX
OS   Homo sapiens.
XX
PN   WO200037641-A2.
XX
PD   29-JUN-2000.
XX
PF   21-DEC-1999;   99WO-US30503.
XX
PR   22-DEC-1998;   98GB-0028377.
PR   18-MAR-1999;   99US-0124967.
PR   08-NOV-1999;   99US-0164131.
XX
PA   (JANC ) JANSSEN PHARM NV.
XX
PI   Gordon RD,  Sprengel JJ,  Yon JR,  Dijkmans JJH,  Gosiewska A;
PI   Dhanaraj SN,  Xu J;
XX
DR   WPI; 2000-442669/38.
DR   N-PSDB; AAA71990.
XX
PT   New vascular endothelial growth factor protein, useful for treating or
PT   preventing diseases associated with inappropriate angiogenesis activity
PT   such as cancer, rheumatoid arthritis, psoriasis and wounds -
XX
PS   Disclosure; Fig 30B; 127pp; English.
XX
CC   This invention describes a novel vascular endothelial growth factor-X
CC   (VEGF-X) protein (Ia) and its encoding polynucleotide (IIa) which has
CC   vulnerary, cytostatic, antirheumatic, antiarthritic, antipsoriatic and
CC   antidiabetic activity and acts as an angiogenesis and vascularization
CC   regulator. An antisense molecule of the invention is useful for treating
CC   or preventing cancer, rheumatoid arthritis, psoriasis and diabetic
CC   retinopathy by inhibiting angiogenic activity or inappropriate
CC   vascularization including formation and proliferation of new blood
CC   vessels, growth and development of tissues, tissue regeneration and organ
CC   and tissue repair in a subject. The products of the invention are useful
CC   for preparing medicaments for treating wounds such as dermal ulcers,
CC   pressure sores, venous sores, diabetic ulcers and burns and to promote
CC   skin graft growth, tissue repair, proliferation of new blood vessels,
CC   tissue regeneration and organ repair by promoting angiogenic activity or
CC   vascularization. This sequence represents a human VEGF-X protein
CC   described in the method of the invention.
XX
SQ   Sequence   345 AA;


  Query Match             100.0%;  Score 754;  DB 21;  Length 345;
  Best Local Similarity   100.0%;  Pred. No. 4.7e-71;
  Matches  136;  Conservative    0;  Mismatches    0;  Indels    0;  Gaps    0;

Qy       1 LDLEDLYRPTWQLLGKAFVFGRKSRVVDLNLLTEEVRLYSCTPRNFSVSIREELKRTDTI 60
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Db     210 ldledlyrptwqllgkafvfgrksrvvdlnllteevrlysctprnfsvsireelkrtdti 269

Qy      61 FWPGCLLVKRCGGNCACCLHNCNECQCVPSKVTKKYHEVLQLRPKTGVRGLHKSLTDVAL 120
           ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db     270 fwpgcllvkrcggncacclhncnecqcvpskvtkkyhevlqlrpktgvrglhksltdval 329

Qy     121 EHHEECDCVCRGSTGG 136
           ||||||||||||||||
Db     330 ehheecdcvcrgstgg 345
```

```
RESULT  14
AAB10650
ID   AAB10650 standard; Protein; 345 AA.
XX
AC   AAB10650;
XX
DT   19-JAN-2001  (first entry)
XX
DE   Human 990126vegx protein.
XX
KW   VEGF-X; vascular endothelial growth factor; human; vulnerary; cytostatic;
KW   antirheumatic; antiarthritic; antipsoriatic; antidiabetic; treatment;
KW   angiogenesis regulator; vascularization regulator; cancer; psoriasis;
KW   rheumatoid arthritis; diabetic retinopathy; blood vessel; organ repair;
KW   tissue regeneration; tissue repair; wound; dermal ulcer; pressure sore;
KW   venous sore; diabetic ulcer; burns; skin graft growth.
XX
OS   Homo sapiens.
XX
PN   WO200037641-A2.
XX
PD   29-JUN-2000.
XX
PF   21-DEC-1999;   99WO-US30503.
XX
PR   22-DEC-1998;   98GB-0028377.
PR   18-MAR-1999;   99US-0124967.
PR   08-NOV-1999;   99US-0164131.
XX
PA   (JANC ) JANSSEN PHARM NV.
XX
PI   Gordon RD,  Sprengel JJ,  Yon JR,  Dijkmans JJH,  Gosiewska A;
PI   Dhanaraj SN,  Xu J;
XX
DR   WPI; 2000-442669/38.
XX
PT   New vascular endothelial growth factor protein, useful for treating or
PT   preventing diseases associated with inappropriate angiogenesis activity
PT   such as cancer, rheumatoid arthritis, psoriasis and wounds -
XX
PS   Disclosure; Fig 11; 127pp; English.
XX
CC   This invention describes a novel vascular endothelial growth factor-X
CC   (VEGF-X) protein (Ia) and its encoding polynucleotide (IIa) which has
CC   vulnerary, cytostatic, antirheumatic, antiarthritic, antipsoriatic and
CC   antidiabetic activity and acts as an angiogenesis and vascularization
CC   regulator. An antisense molecule of the invention is useful for treating
CC   or preventing cancer, rheumatoid arthritis, psoriasis and diabetic
CC   retinopathy by inhibiting angiogenic activity or inappropriate
CC   vascularization including formation and proliferation of new blood
CC   vessels, growth and development of tissues, tissue regeneration and organ
CC   and tissue repair in a subject. The products of the invention are useful
CC   for preparing medicaments for treating wounds such as dermal ulcers,
CC   pressure sores, venous sores, diabetic ulcers and burns and to promote
CC   skin graft growth, tissue repair, proliferation of new blood vessels,
CC   tissue regeneration and organ repair by promoting angiogenic activity or
CC   vascularization. This sequence represents the human 990126vegx protein
CC   used to illustrate the method of the invention.
XX
SQ   Sequence   345 AA;


  Query Match             100.0%;  Score 754;  DB 21;  Length 345;
  Best Local Similarity   100.0%;  Pred. No. 4.7e-71;
  Matches  136;  Conservative    0;  Mismatches    0;  Indels    0;  Gaps    0;

Qy       1 LDLEDLYRPTWQLLGKAFVFGRKSRVVDLNLLTEEVRLYSCTPRNFSVSIREELKRTDTI 60
           ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db     210 ldledlyrptwqllgkafvfgrksrvvdlnllteevrlysctprnfsvsireelkrtdti 269

Qy      61 FWPGCLLVKRCGGNCACCLHNCNECQCVPSKVTKKYHEVLQLRPKTGVRGLHKSLTDVAL 120
```

```
          ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db    270 fwpgcllvkrcggncacclhncnecqcvpskvtkkyhevlqlrpktgvrglhksltdval 329

Qy    121 EHHEECDCVCRGSTGG 136
          ||||||||||||||||
Db    330 ehheecdcvcrgstgg 345


RESULT  15
AAB10651
ID   AAB10651 standard; Protein; 345 AA.
XX
AC   AAB10651;
XX
DT   19-JAN-2001  (first entry)
XX
DE   Human VEGF-X protein #3.
XX
KW   VEGF-X; vascular endothelial growth factor; human; vulnerary; cytostatic;
KW   antirheumatic; antiarthritic; antipsoriatic; antidiabetic; treatment;
KW   angiogenesis regulator; vascularization regulator; cancer; psoriasis;
KW   rheumatoid arthritis; diabetic retinopathy; blood vessel; organ repair;
KW   tissue regeneration; tissue repair; wound; dermal ulcer; pressure sore;
KW   venous sore; diabetic ulcer; burns; skin graft growth.
XX
OS   Homo sapiens.
XX
PN   WO200037641-A2.
XX
PD   29-JUN-2000.
XX
PF   21-DEC-1999;   99WO-US30503.
XX
PR   22-DEC-1998;   98GB-0028377.
PR   18-MAR-1999;   99US-0124967.
PR   08-NOV-1999;   99US-0164131.
XX
PA   (JANC ) JANSSEN PHARM NV.
XX
PI   Gordon RD,  Sprengel JJ,  Yon JR,  Dijkmans JJH,  Gosiewska A;
PI   Dhanaraj SN,  Xu J;
XX
DR   WPI; 2000-442669/38.
XX
PT   New vascular endothelial growth factor protein, useful for treating or
PT   preventing diseases associated with inappropriate angiogenesis activity
PT   such as cancer, rheumatoid arthritis, psoriasis and wounds -
XX
PS   Claim 72; Fig 12; 127pp; English.
XX
CC   This invention describes a novel vascular endothelial growth factor-X
CC   (VEGF-X) protein (Ia) and its encoding polynucleotide (IIa) which has
CC   vulnerary, cytostatic, antirheumatic, antiarthritic, antipsoriatic and
CC   antidiabetic activity and acts as an angiogenesis and vascularization
CC   regulator. An antisense molecule of the invention is useful for treating
CC   or preventing cancer, rheumatoid arthritis, psoriasis and diabetic
CC   retinopathy by inhibiting angiogenic activity or inappropriate
CC   vascularization including formation and proliferation of new blood
CC   vessels, growth and development of tissues, tissue regeneration and organ
CC   and tissue repair in a subject. The products of the invention are useful
CC   for preparing medicaments for treating wounds such as dermal ulcers,
CC   pressure sores, venous sores, diabetic ulcers and burns and to promote
CC   skin graft growth, tissue repair, proliferation of new blood vessels,
CC   tissue regeneration and organ repair by promoting angiogenic activity or
CC   vascularization. This sequence represents the human VEGF-X protein
CC   described in the method of the invention.
XX
SQ   Sequence   345 AA;


 Query Match             100.0%;  Score 754;  DB 21;  Length 345;
 Best Local Similarity   100.0%;  Pred. No. 4.7e-71;
 Matches  136;  Conservative    0;  Mismatches    0;  Indels    0;  Gaps    0;

Qy      1 LDLEDLYRPTWQLLGKAFVFGRKSRVVDLNLLTEEVRLYSCTPRNFSVSIREELKRTDTI 60
          ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db    210 ldledlyrptwqllgkafvfgrksrvvdlnllteevrlysctprnfsvsireelkrtdti 269

Qy     61 FWPGCLLVKRCGGNCACCLHNCNECQCVPSKVTKKYHEVLQLRPKTGVRGLHKSLTDVAL 120
          ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db    270 fwpgcllvkrcggncacclhncnecqcvpskvtkkyhevlqlrpktgvrglhksltdval 329

Qy    121 EHHEECDCVCRGSTGG 136
          ||||||||||||||||
Db    330 ehheecdcvcrgstgg 345


RESULT  16
AAB19578
ID   AAB19578 standard; Protein; 345 AA.
XX
AC   AAB19578;
XX
DT   22-JAN-2001  (first entry)
XX
DE   Human PRO200 (vascular endothelial growth factor E).
XX
KW   PRO200; vascular epithelial growth factor E; VEGF-E; human;
KW   ocular disease; retinopathy; maculopathy; therapy;
KW   retinitis pigmentosa; macular degeneration; retinal detachment;
KW   retinal tear; macular hole; myopia; traumatic chorioretinopathy;
KW   acute retinal necrosis syndrome; contusion; edema;
KW   retinal vision occlusion; vascular disease; retinal vasculitis;
KW   thrombocytopenic purpura; uveitis; retinal occlusion.
XX
OS   Homo sapiens.
XX
FH   Key             Location/Qualifiers
FT   Peptide         1..14
FT                   /label= Signal_peptide
FT   Protein         15..345
FT                   /label= Mature_Pro200
FT   Modified-site   25..29
FT                   /note= "Asn is N-glycosylated"
FT   Modified-site   55..59
FT                   /note= "Asn is N-glycosylated"
FT   Modified-site   254..258
FT                   /note= "Asn is N-glycosylated"
FT   Modified-site   15..21
FT                   /note= "N-myristoylation"
FT   Modified-site   117..123
FT                   /note= "N-myristoylation"
FT   Modified-site   127..133
FT                   /note= "N-myristoylation"
FT   Modified-site   281..287
FT                   /note= "N-myristoylation"
FT   Modified-site   282..288
FT                   /note= "N-myristoylation"
FT   Modified-site   319..325
FT                   /note= "Amidation"
XX
PN   WO200053760-A2.
XX
PD   14-SEP-2000.
XX
PF   10-MAR-2000; 2000WO-US06319.
XX
PR   12-MAR-1999;   99US-0123957.
XX
PA   (GETH ) GENENTECH INC.
XX
PI   Ferrara N,  Goddard A,  Gurney AL,  Hebert C,  Henzel WJ,  Kabakoff RC;
PI   Klein RD,  Kljavin IJ,  Kuo SS,  La Fleur M,  Wood WI;
XX
DR   WPI; 2000-587437/55.
DR   N-PSDB; AAA88515.
```

```
XX
PT   Novel PRO polypeptides useful for preventing or rescuing retinal cells
PT   from injury caused by ocular diseases such as retinitis pigmentosa,
PT   retinopathy, retinal degenerative diseases, degenerative myopia,
PT   uveitis -
XX
PS   Claim 2; Fig 2; 140pp; English.
XX
CC   The present sequence is that of human PRO200 or vascular
CC   endothelial growth factor E (VEGF-E), as predicted from a cDNA
CC   clone (see AAA88515) that was isolated from a glioma cell line G61
CC   library using probes (see AAA88523-26) based on an expressed sequence
CC   tag (see AAA88522) that showed homology to VEGF.  PRO200 has a
CC   predicted mol.wt. of 39,029 and a pI of about 6.06.  A method for
CC   producing PRO polypeptides, including PRO200, using a host cell
CC   transformed with a vector comprising a PRO nucleic acid is claimed.
CC   The invention relates to the use of PRO polypeptides to delay,
CC   prevent or rescue retinal cells such as retinal neurons selected from
CC   photoreceptors, retinal ganglion cells, displaced retinal ganglion
CC   cells, amacrine cells, displaced amacrine cells, horizontal and
CC   bipolar neurons, and supportive cells (including Mueller cells and
CC   pigment epithelial cells) from injury and degradation.  The retinal
CC   cells are preferably photoreceptors and photoreceptor cell injury or
CC   death is caused by retinal injury, light or environmental trauma or
CC   by an ocular disease selected from retinitis pigmentosa, macular
CC   degeneration, including age-related, retinal detachment, retinal
CC   tears, retinopathy, retinal degenerative diseases, macular holes,
CC   degenerative myopia, acute retinal necrosis syndrome, traumatic
CC   chorioretinopathies or contusion such as Purtscher's retinopathy,
CC   edema, ischemic conditions such as central or branch retinal vision
CC   occlusion, collagen vascular diseases, thrombocytopenic purpura,
CC   uveitis, retinal vasculitis and occlusion associated with Eales
CC   disease and systemic lupus erythematosus (claimed).
XX
SQ   Sequence   345 AA;


  Query Match             100.0%;  Score 754;  DB 21;  Length 345;
  Best Local Similarity   100.0%;  Pred. No. 4.7e-71;
  Matches  136;  Conservative    0;  Mismatches    0;  Indels    0;  Gaps    0;

Qy       1 LDLEDLYRPTWQLLGKAFVFGRKSRVVDLNLLTEEVRLYSCTPRNFSVSIREELKRTDTI 60
           ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db     210 ldledlyrptwqllgkafvfgrksrvvdlnllteevrlysctprnfsvsireelkrtdti 269

Qy      61 FWPGCLLVKRCGGNCACCLHNCNECQCVPSKVTKKYHEVLQLRPKTGVRGLHKSLTDVAL 120
           ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db     270 fwpgcllvkrcggncacclhncnecqcvpskvtkkyhevlqlrpktgvrglhksltdval 329

Qy     121 EHHEECDCVCRGSTGG 136
           ||||||||||||||||
Db     330 ehheecdcvcrgstgg 345


RESULT  17
AAB33414
ID   AAB33414 standard; Protein; 345 AA.
XX
AC   AAB33414;
XX
DT   29-JAN-2001  (first entry)
XX
DE   Human PRO200 protein UNQ174 SEQ ID NO:2.
XX
KW   Human; immune related disease; diagnosis; antiinflammatory; cardiant;
KW   dermatological; antiarthritic; antirheumatic; immunosuppressive;
KW   haemostatic; antithyroid; antidiabetic; nootropic; neuroprotective;
KW   antianaemic; hepatotropic; virucide; antipsoriatic; antiallergic;
KW   antiasthmatic; systemic lupus erythematosus; rheumatoid arthritis;
KW   osteoarthritis; spondyloarthropathy; systemic sclerosis; sarcoidosis;
KW   idiopathic inflammatory myopathy; Sjogren's syndrome; thyroiditis;
KW   systemic vasculitis; autoimmune haemolytic anaemia; diabetes mellitus;
KW   autoimmune thrombocytopaenia; immune-mediated renal disease;
KW   demyelinating disease; hepatobiliary disease; Whipple's disease;
KW   inflammatory bowel disease; gluten-sensitive enteropathy;
KW   autoimmune disease; immune-mediated skin disease; allergic disease;
KW   immunological disease; transplantation associated disease;
KW   graft rejection; graft-versus-host-disease.
XX
OS   Homo sapiens.
XX
PN   WO200053758-A2.
XX
PD   14-SEP-2000.
XX
PF   02-MAR-2000; 2000WO-US05841.
XX
PR   08-MAR-1999;   99WO-US05028.
PR   10-MAR-1999;   99US-0123618.
PR   12-MAR-1999;   99US-0123957.
PR   23-MAR-1999;   99US-0125775.
PR   12-APR-1999;   99US-0128849.
PR   20-APR-1999;   99WO-US08615.
PR   28-APR-1999;   99US-0131445.
PR   04-MAY-1999;   99US-0132371.
PR   14-MAY-1999;   99US-0134287.
PR   02-JUN-1999;   99WO-US12252.
PR   23-JUN-1999;   99US-0141037.
PR   20-JUL-1999;   99US-0144758.
PR   26-JUL-1999;   99US-0145698.
PR   28-JUL-1999;   99US-0146222.
PR   01-SEP-1999;   99WO-US20111.
PR   08-SEP-1999;   99WO-US20594.
PR   13-SEP-1999;   99WO-US20944.
PR   15-SEP-1999;   99WO-US21090.
PR   15-SEP-1999;   99WO-US21547.
PR   05-OCT-1999;   99WO-US23089.
PR   29-OCT-1999;   99US-0162506.
PR   29-NOV-1999;   99WO-US28214.
PR   30-NOV-1999;   99WO-US28313.
PR   30-NOV-1999;   99WO-US28409.
PR   01-DEC-1999;   99WO-US28301.
PR   01-DEC-1999;   99WO-US28634.
PR   02-DEC-1999;   99WO-US28551.
PR   02-DEC-1999;   99WO-US28564.
PR   02-DEC-1999;   99WO-US28565.
PR   16-DEC-1999;   99WO-US30095.
PR   20-DEC-1999;   99WO-US30999.
PR   30-DEC-1999;   99WO-US31274.
PR   05-JAN-2000; 2000WO-US00219.
PR   06-JAN-2000; 2000WO-US00277.
PR   06-JAN-2000; 2000WO-US00376.
PR   11-FEB-2000; 2000WO-US03565.
PR   18-FEB-2000; 2000WO-US04341.
PR   18-FEB-2000; 2000WO-US04342.
PR   22-FEB-2000; 2000WO-US04414.
XX
PA   (GETH ) GENENTECH INC.
XX
PI   Ashkenazi AJ,  Baker KP,  Goddard A,  Gurney AL,  Hebert C,  Henzel W;
PI   Kabakoff RC,  Lu Y,  Pan J,  Pennica D,  Shelton DL,  Smith V;
PI   Stewart TA,  Tumas D,  Watanabe CK,  Wood WI,  Yan M;
XX
DR   WPI; 2000-572271/53.
DR   N-PSDB; AAC58579.
XX
PT   Sixty four PRO polypeptides, useful in the diagnosis and treatment of
PT   immune related disorders, e.g. systemic lupus erythematosis, rheumatoid
PT   arthritis, osteoarthritis, thyroiditis and diabetes mellitus -
XX
PS   Claim 33; Fig 2; 309pp; English.
XX
CC   The present invention describes sixty four human PRO proteins which can
CC   be used in the treatment of immune related diseases. The human PRO
CC   proteins, anti-PRO antibodies, agonists and antagonists are useful for
CC   treating and diagnosing immune related disorders. The disorders are
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CC   selected from systemic lupus erythematosus, rheumatoid arthritis,
CC   osteoarthritis, juvenile chronic arthritis, spondyloarthropathies,
CC   systemic sclerosis, idiopathic inflammatory myopathies, Sjogren's
CC   syndrome, systemic vasculitis, sarcoidosis, autoimmune haemolytic
CC   anaemia, autoimmune thrombocytopaenia, thyroiditis, diabetes mellitus,
CC   immune-mediated renal disease, demyelinating diseases of the central
CC   and peripheral nervous systems, hepatobiliary diseases, inflammatory
CC   bowel disease, gluten-sensitive enteropathy and Whipple's disease,
CC   autoimmune or immune-mediated skin diseases, allergic diseases,
CC   immunological diseases of the lung, and transplantation associated
CC   diseases including graft rejection and graft-versus-host-disease.
CC   AAC58397 to AAC58578 represent PCR primers and hybridisation probes used
CC   in the isolation of human PRO sequences. AAC58579 to AAC58642 and
CC   AAB33414 to AAB33477 represent human PRO polynucleotide and protein
CC   sequences given in the exemplification of the present invention.
XX
SQ   Sequence   345 AA;


  Query Match             100.0%;  Score 754;  DB 21;  Length 345;
  Best Local Similarity   100.0%;  Pred. No. 4.7e-71;
  Matches  136;  Conservative    0;  Mismatches    0;  Indels    0;  Gaps    0;

Qy       1 LDLEDLYRPTWQLLGKAFVFGRKSRVVDLNLLTEEVRLYSCTPRNFSVSIREELKRTDTI 60
           ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db     210 ldledlyrptwqllgkafvfgrksrvvdlnllteevrlysctprnfsvsireelkrtdti 269

Qy      61 FWPGCLLVKRCGGNCACCLHNCNECQCVPSKVTKKYHEVLQLRPKTGVRGLHKSLTDVAL 120
           ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db     270 fwpgcllvkrcggncacclhncnecqcvpskvtkkyhevlqlrpktgvrglhksltdval 329

Qy     121 EHHEECDCVCRGSTGG 136
           ||||||||||||||||
Db     330 ehheecdcvcrgstgg 345


RESULT  18
AAB24412
ID   AAB24412 standard; Protein; 345 AA.
XX
AC   AAB24412;
XX
DT   07-NOV-2000  (first entry)
XX
DE   Human PRO713 protein sequence SEQ ID NO:137.
XX
KW   Human; PRO; promotion; inhibition; angiogenesis; cardiovascularisation;
KW   diagnosis; trauma; wound; cancer; atherosclerosis; cardiac hypertrophy;
KW   angiogenic; proliferative; cardiant; cardiovascular; antiatherosclerotic;
KW   cytostatic; gene therapy; vaccine.
XX
OS   Homo sapiens.
XX
PN   WO200032221-A2.
XX
PD   08-JUN-2000.
XX
PF   30-NOV-1999;   99WO-US28313.
XX
PR   01-DEC-1998;   98WO-US25108.
PR   16-DEC-1998;   98US-0112850.
PR   12-JAN-1999;   99US-0115554.
PR   08-MAR-1999;   99WO-US05028.
PR   12-MAR-1999;   99US-0123957.
PR   28-APR-1999;   99US-0131445.
PR   14-MAY-1999;   99US-0134287.
PR   02-JUN-1999;   99WO-US12252.
PR   23-JUN-1999;   99US-0141037.
PR   20-JUL-1999;   99US-0144758.
PR   26-JUL-1999;   99US-0145698.
PR   01-SEP-1999;   99WO-US20111.
PR   08-SEP-1999;   99WO-US20594.
PR   13-SEP-1999;   99WO-US20944.
PR   15-SEP-1999;   99WO-US21090.
PR   15-SEP-1999;   99WO-US21547.
PR   05-OCT-1999;   99WO-US23089.
PR   29-OCT-1999;   99US-0162506.
XX
PA   (GETH ) GENENTECH INC.
XX
PI   Ashkenazi AJ,  Baker KP,  Ferrara N,  Gerber H,  Hillan KJ,  Goddard A;
PI   Godowski PJ,  Gurney AL,  Klein RD,  Kuo SS,  Paoni NF,  Smith V;
PI   Watanabe CK,  Williams PM,  Wood WI;
XX
DR   WPI; 2000-412154/35.
DR   N-PSDB; AAA77621.
XX
PT   Nucleic acids encoding PRO polypeptides useful for preventing,
PT   diagnosing and treating diagnosing a cardiovascular, endothelial or
PT   angiogenic disorders in mammals -
XX
PS   Claim 72; Fig 50; 315pp; English.
XX
CC   The present invention describes nucleic acids encoding PRO polypeptides
CC   useful for preventing, diagnosing and treating diagnosing a
CC   cardiovascular, endothelial or angiogenic disorder in mammals by
CC   modulating cell proliferation, angiogenesis and cardiovascularisation,
CC   and for identifying agonists and antagonists of these processes. The
CC   nucleic acids and the proteins they encode may be used in the
CC   prevention, treatment and diagnosis of diseases associated with
CC   inappropriate PRO expression such as cardiovascular, endothelial or
CC   angiogenic disorders in mammals (e.g. atherosclerosis, cancers and
CC   cardiac hypertrophy). For example, the nucleic acids (NCs) and vectors
CC   containing them and the PRO polypeptide may be used to treat disorders
CC   associated with decreased PRO expression. AAA77510 to AAA77721 and
CC   AAB24388 to AAB24435 represent nucleotide and protein sequences used in
CC   the exemplification of the present invention.
XX
SQ   Sequence   345 AA;


  Query Match             100.0%;  Score 754;  DB 21;  Length 345;
  Best Local Similarity   100.0%;  Pred. No. 4.7e-71;
  Matches  136;  Conservative    0;  Mismatches    0;  Indels    0;  Gaps    0;

Qy       1 LDLEDLYRPTWQLLGKAFVFGRKSRVVDLNLLTEEVRLYSCTPRNFSVSIREELKRTDTI 60
           ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db     210 ldledlyrptwqllgkafvfgrksrvvdlnllteevrlysctprnfsvsireelkrtdti 269

Qy      61 FWPGCLLVKRCGGNCACCLHNCNECQCVPSKVTKKYHEVLQLRPKTGVRGLHKSLTDVAL 120
           ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db     270 fwpgcllvkrcggncacclhncnecqcvpskvtkkyhevlqlrpktgvrglhksltdval 329

Qy     121 EHHEECDCVCRGSTGG 136
           ||||||||||||||||
Db     330 ehheecdcvcrgstgg 345


RESULT  19
AAB01419
ID   AAB01419 standard; Protein; 345 AA.
XX
AC   AAB01419;
XX
DT   20-OCT-2000  (first entry)
XX
DE   Human TANGO 128.
XX
KW   TANGO; 128; 140; 197; 212; 213; 224; 239; modulating agent; asthma;
KW   graft versus-host diseases; rheumatoid arthritis; psoriasis;
KW   inflammatory bowel disease; septic shock; ulcerative colitis;
KW   Crohn's disease; chronic myelogenous leukemia; cancer; liver
KW   disease; Hodgkin's disease; osteoarthritis; Lyme's disease;
KW   cachexia; autoimmune disease; myasthemia gravis; autoimmune diabetes;
KW   systemic lupus erythematosus; transgenic animal; diagnosis;
KW   prognosis; prophylatic; therapeutic; human.
```

```
XX
OS   Homo sapiens.
XX
PN   WO200039284-A1.
XX
PD   06-JUL-2000.
XX
PF   23-DEC-1999;   99WO-US31025.
XX
PR   30-DEC-1998;   98US-0223546.
XX
PA   (MILL-) MILLENNIUM PHARM INC.
XX
PI   Holtzman DA;
XX
DR   WPI; 2000-465743/40.
DR   N-PSDB; AAA47452.
XX
PT   Novel nucleic acid sequences encoding TANGO-128, 140, 197, 212, 213,
PT   224 and 239 polypeptides useful for the treatment of asthma, rheumatoid
PT   arthritis, psoriasis and autoimmune diseases
XX
PS   Claim 8; Fig 1; 209pp; English.
XX
CC   Nucleic acids encoding TANGO polypeptides are useful as modulating
CC   agents for regulating cellular processes like asthma, graft
CC   versus-host diseases, rheumatoid arthritis, psoriasis, inflammatory
CC   bowel disease, septic shock, ulcerative colitis, Crohn's disease,
CC   chronic myelogenous leukemia, cancer, liver disease, Hodgkin's
CC   disease, osteoarthritis, Lyme's disease, cachexia and autoimmune
CC   diseases e.g. myasthemia gravis, autoimmune diabetes and systemic
CC   lupus erythematosus. The nucleic acids are also useful for producing
CC   transgenic animals and the TANGO polypeptides themselves. Partial
CC   TANGO-128, 140, 197, 212, 213, 224, 239 sequences are useful in
CC   forensic biology, for diagnostic assays, prognostic assays,
CC   pharmacogenomics and for monitoring clinical trials. TANGO
CC   polypeptides are suitable for both prophylactic and therapeutic
CC   methods for treating a subject at risk of a disorder or having a
CC   disorder associated with aberrant TANGO expression. A wide range
CC   of cellular disorders can be treated.
XX
SQ   Sequence   345 AA;


  Query Match             100.0%;  Score 754;  DB 21;  Length 345;
  Best Local Similarity   100.0%;  Pred. No. 4.7e-71;
  Matches  136;  Conservative    0;  Mismatches    0;  Indels    0;  Gaps    0;

Qy       1 LDLEDLYRPTWQLLGKAFVFGRKSRVVDLNLLTEEVRLYSCTPRNFSVSIREELKRTDTI 60
          ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db     210 idledlyrptwqllgkafvfgrksrvvdlnllteevrlysctprnfsvsireelkrtdti 269

Qy      61 FWPGCLLVKRCGGNCACCLHNCNECQCVPSKVTKKYHEVLQLRPKTGVRGLHKSLTDVAL 120
          ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db     270 fwpgcllvkrcggncacclhncnecqcvpskvtkkyhevlqlrpktgvrglhksltdval 329

Qy     121 EHHEECDCVCRGSTGG 136
          ||||||||||||||||
Db     330 ehheecdcvcrgstgg 345


RESULT  20
AAB03003
ID   AAB03003 standard; Protein; 345 AA.
XX
AC   AAB03003;
XX
DT   25-SEP-2000  (first entry)
XX
DE   Human growth factor related molecule GFRP-4.
XX
KW   Human GFRP-4; growth factor related molecule; diseased breast tissue;
KW   bone morphogenetic protein 1; BMP-1; inflammation; immune response;
KW   reproductive tissue; reproductive tissue; developmental disorder; cell
KW   proliferative disorder; immune disorder; reproductive disorder;
KW   cardiovascular disorder; bacterial infection; viral; fungal; parasitic;
KW   cancer; allergy; asthma; arteriosclerosis; therapy; diagnosis.
XX
OS   Homo sapiens.
XX
FH   Key             Location/Qualifiers
FT   Peptide         1..14
FT                   /note= "Signal peptide"
FT   Modified-site   20
FT                   /note= "Phosphorylated by casein kinase II"
FT   Modified-site   25
FT                   /note= "N-glycosylated"
FT   Modified-site   27
FT                   /note= "Phosphorylated by protein kinase C"
FT   Modified-site   34
FT                   /note= "Phosphorylated by casein kinase II and
FT                         protein kinase C"
FT   Domain          48..160
FT                   /note= "CUB domain"
FT   Modified-site   55
FT                   /note= "N-glycosylated"
FT   Modified-site   60
FT                   /note= "Phosphorylated by protein kinase C"
FT   Modified-site   89
FT                   /note= "Phosphorylated by casein kinase II"
FT   Disulfide-bond  104..124
FT   Modified-site   194
FT                   /note= "Phosphorylated by casein kinase II"
FT   Modified-site   195
FT                   /note= "Phosphorylated by casein kinase II"
FT   Region          229..310
FT                   /note= "PDGF (platelet-derived growth factor) family
FT                         signature"
FT   Modified-site   251
FT                   /note= "Phosphorylated by protein kinase C"
FT   Modified-site   254
FT                   /note= "N-glycosylated"
FT   Modified-site   258
FT                   /note= "Phosphorylated by casein kinase II and
FT                         protein kinase C"
FT   Domain          269..337
FT                   /note= "PDGF domain"
FT   Modified-site   302
FT                   /note= "Phosphorylated by protein kinase C"
FT   Modified-site   323
FT                   /note= "Phosphorylated by casein kinase II"
XX
PN   WO200024774-A2.
XX
PD   04-MAY-2000.
XX
PF   28-OCT-1999;   99WO-US25458.
XX
PR   28-OCT-1998;   98US-0181711.
PR   11-DEC-1998;   98US-0209547.
PR   17-MAY-1999;   99US-0313457.
XX
PA   (INCY-) INCYTE PHARM INC.
XX
PI   Tang YT,  Yue H,  Hillman JL,  Corley NC,  Guegler KJ,  Baughn MR;
PI   Au-Young J;
XX
DR   WPI; 2000-350695/30.
DR   N-PSDB; AAA52458.
XX
PT   Human growth factor related molecule protein useful for the diagnosis
PT   and treatment of disorders associated with its activity including
PT   developmental, cell proliferative, immune, reproductive and
PT   cardiovascular disorders and infections -
XX
PS   Claim 1; Fig 4; 80pp; English.
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XX
CC   This sequence represents human growth factor related molecule GFRP-4.
CC   cDNA encoding GFRP-4 was initially identified in a diseased breast
CC   tissue cDNA library, and the present sequence is encoded by a consensus
CC   cDNA derived from several overlapping and/or extended cDNA clones.
CC   GFRP-4 has chemical and structural homology with human bone
CC   morphogenetic protein 1 (BMP-1) (27% identity at the BMP-1 C-terminus).
CC   GFRP-4 was found by Northern analysis to be expressed in reproductive
CC   and cardiovascular tissue, and in cDNA libaries associated with cancer,
CC   inflammation and the immune response. GFRP proteins (AAB03000-B03003),
CC   nucleotides encoding them (AAA52455-A52458), GFRP agonists and
CC   antagonists may be used to treat a wide variety of diseases associated
CC   with increased or decreased expression or activity of GFRP proteins.
CC   Conditions which may be treated include developmental disorders, cell
CC   proliferative disorders (e.g., cancers), immune disorders (e.g.,
CC   allergies, asthma), reproductive disorders (e.g., menstrual cycle
CC   disorders) cardiovascular disorders (e.g, arteriosclerosis) and
CC   bacterial, viral, fungal or parasitic infections. Additionally, GFRP
CC   proteins and nucleotides can be used in the diagnosis of such disorders.
XX
SQ   Sequence   345 AA;


  Query Match             100.0%;  Score 754;  DB 21;  Length 345;
  Best Local Similarity   100.0%;  Pred. No. 4.7e-71;
  Matches  136;  Conservative    0;  Mismatches    0;  Indels    0;  Gaps    0;

Qy       1 LDLEDLYRPTWQLLGKAFVFGRKSRVVDLNLLTEEVRLYSCTPRNFSVSIREELKRTDTI 60
          ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db     210 ldledlyrptwqllgkafvfgrksrvvdlnllteevrlysctprnfsvsireelkrtdti 269

Qy      61 FWPGCLLVKRCGGNCACCLHNCNECQCVPSKVTKKYHEVLQLRPKTGVRGLHKSLTDVAL 120
          ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db     270 fwpgcllvkrcggncacclhncnecqcvpskvtkkyhevlqlrpktgvrglhksltdval 329

Qy     121 EHHEECDCVCRGSTGG 136
          ||||||||||||||||
Db     330 ehheecdcvcrgstgg 345


RESULT  21
AAY96858
ID   AAY96858 standard; Protein; 345 AA.
XX
AC   AAY96858;
XX
DT   26-SEP-2000  (first entry)
XX
DE   Human growth factor homologue, ZVEGF3.
XX
KW   Vascular endothelial growth factor; homologue; zvegf3; CUB domain;
KW   Cysteine knot; platelet-derived growth factor; PDGF; neuropilin;
KW   chromosome 4q28.3; cytostatic; anti-psoriatic; anti-inflammatory;
KW   anti-diabetic; ophthalmological; anti-rheumatic; anti-arthritic;
KW   vulnerary.
XX
OS   Homo sapiens.
XX
FH   Key             Location/Qualifiers
FT   Peptide          1..14
FT                    /label= secretory_peptide
FT   Domain           46..163
FT                    /label= CUB_domain
FT                    /note= "forms beta-barrel structure with nine
FT                          distinct beta-strand-like regions"
FT   Region           48..51
FT                    /label= Beta-strand-like_region-1
FT   Region           55..59
FT                    /label= Beta-strand-like_region-2
FT   Region           72..78
FT                    /label= Beta-strand-like_region-3
FT   Region           85..90
FT                    /label= Beta-strand-like_region-4
FT   Region           92..94
FT                    /label= Beta-strand-like_region-5
FT   Region           107..112
FT                    /label= Beta-strand-like_region-6
FT   Region           119..123
FT                    /label= Beta-strand-like_region-7
FT   Region           139..146
FT                    /label= Beta-strand-like_region-8
FT   Region           156..163
FT                    /label= Beta-strand-like_region-9
FT   Peptide          164..234
FT                    /label= Propeptide-like_sequence
FT   Cleavage-site    231..232
FT                    /note= "Potential cleavage site"
FT   Cleavage-site    231..234
FT                    /note= "Furin or furin-like protease target site"
FT   Domain           234..345
FT                    /label= Growth_Factor_Domain
FT                    /note= "characterized with cystine knot structure"
FT   Disulfide-bond   250..296
FT                    /note= "forms part of cystine knot"
FT   Region           251..259
FT                    /label= Beta-strand-like_region-1
FT   Region           275..279
FT                    /label= Beta-strand-like_region-2
FT   Disulfide-bond   280..335
FT                    /note= "forms part of cystine knot"
FT   Disulfide-bond   284..337
FT                    /note= "forms part of cystine knot"
FT   Region           297..301
FT                    /label= Beta-strand-like_region-5
FT   Region           329..334
FT                    /label= Beta-strand-like_region-6
XX
PN   WO200034474-A2.
XX
PD   15-JUN-2000.
XX
PF   07-DEC-1999;   99WO-US28968.
XX
PR   07-DEC-1998;   98US-0207120.
PR   06-JUL-1999;   99US-0142576.
PR   21-OCT-1999;   99US-0161653.
PR   12-NOV-1999;   99US-0165255.
XX
PA   (ZYMO ) ZYMOGENETICS INC.
XX
PI   Gao Z,  Hart CE,  Piddington CS,  Sheppard PO,  Shoemaker KE;
PI   Gilbertson DG,  West JW;
XX
DR   WPI; 2000-423420/36.
DR   N-PSDB; AAA51498, AAA51499.
XX
PT   Novel zvegf3 polypeptides and nucleotides encoding them useful for
PT   stimulating growth of smooth muscle cells and fibroblasts comprising an
PT   epitope bearing portion of a specific amino acid sequence
XX
PS   Claim 1; Page 149; 173pp; English.
XX
CC   This is a human vascular endothelial growth factor homologue, designated
CC   ZVEGF3. Polypeptides comprising an epitope-bearing portion human or
CC   murine ZVEGF3 are claimed. The growth factors comprise a growth factor
CC   domain and a CUB domain (generic sequence motifs are shown in AAY96859
CC   and AAY96860). The growth factor domain is characterized by an
CC   arrangement of cysteine residues and beta-strands that is characteristic
CC   of the "cystine knot" structure of the platelet-derived growth factor
CC   (PDGF) family. The CUB domain shows homology to CUB domains in
CC   neuropilins, human bone morphogenetic protein-1, porcine seminal plasma
CC   protein, bovine acidic seminal fluid protein and Xenopus laevis
CC   tolloid-like protein. Structural analysis and homology predict that
CC   ZVEGF3 polypeptides complex with a second polypeptide to form multimeric
CC   proteins. The human zvegf3 gene has been mapped to chromosome 4q28.3.
CC   ZVEGF3 is useful for stimulating the growth of fibroblasts or smooth
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CC   muscles cells, for activating cell surface PDGF-alpha receptor and for
CC   inhibiting PDGF-alpha receptor mediated cellular processes. ZVEGF3 is
CC   useful for regulating (post-development) organ growth, regeneration and
CC   maintenance, as well as tissue maintenance and repair processes. ZVEGF3
CC   antagonists are useful for treating cancer, rheumatoid arthritis,
CC   diabetic retinopathy, ischemic limb disease, peripheral vascular
CC   disease, myocardial ischemia, vascular intimal hyperplasia,
CC   atherosclerosis, wound healing, chronic liver disease and haemangioma
CC   formation. ZVEGF3 can also be used to modulate neurite growth and
CC   development of the nervous system, and for treating neurodegenerative
CC   diseases.
XX
SQ   Sequence   345 AA;


  Query Match             100.0%;  Score 754;  DB 21;  Length 345;
  Best Local Similarity   100.0%;  Pred. No. 4.7e-71;
  Matches  136;  Conservative    0;  Mismatches    0;  Indels    0;  Gaps    0;

Qy       1 LDLEDLYRPTWQLLGKAFVFGRKSRVVDLNLLTEEVRLYSCTPRNFSVSIREELKRTDTI 60
           ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db     210 ldledlyrptwqllgkafvfgrksrvvdlnllteevrlysctprnfsvsireelkrtdti 269

Qy      61 FWPGCLLVKRCGGNCACCLHNCNECQCVPSKVTKKYHEVLQLRPKTGVRGLHKSLTDVAL 120
           ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db     270 fwpgcllvkrcggncacclhncnecqcvpskvtkkyhevlqlrpktgvrglhksltdval 329

Qy     121 EHHEECDCVCRGSTGG 136
           ||||||||||||||||
Db     330 ehheecdcvcrgstgg 345


RESULT  22
AAY84557
ID   AAY84557 standard; Protein; 345 AA.
XX
AC   AAY84557;
XX
DT   25-JUL-2000  (first entry)
XX
DE   Amino acid sequence of platelet-derived growth factor C (PDGF-C).
XX
KW   Platelet-derived growth factor C; PDGF-C; cell proliferation;
KW   growth factor; heparin; connective tissue; wound healing; VEGF-F;
KW   fibroblast mitogenesis; PDGF alpha receptor activation; tumour growth;
KW   choriocarcinoma; Wilms tumour; megakaryoblastic leukaemia;
KW   lung carcinoma; erythroleukemia; tissue remodelling.
XX
OS   Homo sapiens.
XX
PN   WO200018212-A2.
XX
PD   06-APR-2000.
XX
PF   30-SEP-1999;   99WO-US22668.
XX
PR   30-SEP-1998;   98US-0102461.
PR   12-NOV-1998;   98US-0108109.
PR   03-DEC-1998;   98US-0110749.
PR   18-DEC-1998;   98US-0113002.
PR   21-MAY-1999;   99US-0135426.
PR   15-JUL-1999;   99US-0144022.
XX
PA   (LUDW-) LUDWIG INST CANCER RES.
PA   (UYHE-) UNIV HELSINKI LICENSING LTD.
XX
PI   Eriksson U,  Aase K,  Lee X,  Ponten A,  Uutela M,  Alitalo K;
PI   Oestman A,  Heldin C,  Betsholz C;
XX
DR   WPI; 2000-292954/25.
DR   N-PSDB; AAA12523.
XX
PT   Novel DNA encoding PDGF-C useful to stimulate or enhance proliferation,
PT   differentiation, growth and motility of cells expressing the PDGF-C
PT   receptor -
XX
PS   Claim 27; Fig 2; 135pp; English.
XX
CC   The present sequence represents human platelet-derived growth factor C
CC   (PDGF-C) (formally designated VEGF-F). PDGF-C polypeptides have the
CC   ability to stimulate and enhance proliferation or differentiation,
CC   and/or growth or motility of cells expressing a PDGF-C receptor.
CC   PDGF-C polypeptides can be used in pharmaceuticals for promoting cell
CC   proliferation, preferably in combination with one other growth factor
CC   and heparin. Pharmaceuticals comprising PDGF-C polypeptides can also
CC   be used for stimulating connective tissue or wound healing. The
CC   PDGF-C polypeptide can be enzymatically processed to generate the active
CC   truncated form of PDGF-C and used to regulate the receptor-binding
CC   specificity of PDGF-C. PDGF-C can also be used to promote fibroblast
CC   mitogenesis in a mammal and to induce PDGF alpha receptor activation.
CC   PDGF-C antagonists can be used to inhibit tumour growth of a tumour
CC   expressing PDGF-C in a mammal. Specific types of human tumours, e.g.
CC   choriocarcinoma, Wilms tumour, megakaryoblastic leukaemia, lung carcinoma
CC   and erythroleukemia, can be identified by testing for expression of
CC   PDGF-C. PDGF-C antagonists can also be used to inhibit tissue
CC   remodelling during invasion of tumour cells into a normal population of
CC   cells. Antagonists can also be used to treat fibrotic conditions,
CC   especially found in the lung, kidney or liver.
XX
SQ   Sequence   345 AA;


  Query Match             100.0%;  Score 754;  DB 21;  Length 345;
  Best Local Similarity   100.0%;  Pred. No. 4.7e-71;
  Matches  136;  Conservative    0;  Mismatches    0;  Indels    0;  Gaps    0;

Qy       1 LDLEDLYRPTWQLLGKAFVFGRKSRVVDLNLLTEEVRLYSCTPRNFSVSIREELKRTDTI 60
           ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db     210 ldledlyrptwqllgkafvfgrksrvvdlnllteevrlysctprnfsvsireelkrtdti 269

Qy      61 FWPGCLLVKRCGGNCACCLHNCNECQCVPSKVTKKYHEVLQLRPKTGVRGLHKSLTDVAL 120
           ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db     270 fwpgcllvkrcggncacclhncnecqcvpskvtkkyhevlqlrpktgvrglhksltdval 329

Qy     121 EHHEECDCVCRGSTGG 136
           ||||||||||||||||
Db     330 ehheecdcvcrgstgg 345


RESULT  23
AAY59285
ID   AAY59285 standard; Protein; 345 AA.
XX
AC   AAY59285;
XX
DT   25-APR-2000  (first entry)
XX
DE   Bone morphogenic protein (BMP) (clone HETAB62).
XX
KW   Bone morphogenic protein; BMP; cytostatic; osteopathic; angiogenic;
KW   vulnerary; bone disorder; osteoarthritis; cartilage defect; human;
KW   tissue repair; gene therapy.
XX
OS   Homo sapiens.
XX
FH   Key             Location/Qualifiers
FT   Peptide         1..22
FT                   /note= "signal peptide"
FT   Peptide         15..26
FT                   /note= "immunogenic epitope"
FT   Protein         23..345
FT                   /note= "mature protein"
FT   Peptide         33..46
FT                   /note= "immunogenic epitope"
FT   Peptide         133..138
FT                   /note= "immunogenic epitope"
```

```
FT   Peptide         214..220
FT                   /note= "immunogenic epitope"
FT   Peptide         249..255
FT                   /note= "immunogenic epitope"
FT   Peptide         261..267
FT                   /note= "immunogenic epitope"
XX
PN   WO200004183-A1.
XX
PD   27-JAN-2000.
XX
PF   14-JUL-1999;   99WO-US15783.
XX
PR   15-JUL-1998;   98US-0092922.
XX
PA   (HUMA-) HUMAN GENOME SCI INC.
XX
PI   Ruben SM,  Young PE;
XX
DR   WPI; 2000-182442/16.
DR   N-PSDB; AAZ48599.
XX
PT   Novel cDNA encoding human bone morphogenic proteins, vectors, host
PT   cells and methods of recombinant production, useful for diagnosis and
PT   treatment of, e.g. bone disorders  -
XX
PS   Claim 11; Page 183-184; 187pp; English.
XX
CC   The invention provides novel human bone morphogenic proteins (BMP) and
CC   nucleic acids encoding the BMPs. The BMP polypeptides can be expressed
CC   by standard recombinant methodology. Determining the presence or absence
CC   of a mutation in the polynucleotides or determining the presence or
CC   amount of expression of the polypeptides is useful for diagnosing a
CC   pathological condition or a susceptibility to a pathological condition
CC   in a subject. The polynucleotides can also be used to prevent, treat or
CC   ameliorate a medical condition. The proteins are useful for diagnosis
CC   and/or treatment of diseases associated with BMPs, in particular bone
CC   disorders (e.g. osteoarthritis, cartilage defects and tissue repair),
CC   and in particular for stimulation of angiogenesis. The polynucleotides
CC   are useful as reagents for differential identification of tissues or cell
CC   types present in biological samples. The polynucleotides can be used in
CC   gene therapy to promote the growth of endothelial cells. The present
CC   sequence represents a BMP of the invention (clone HETAB62).
XX
SQ   Sequence   345 AA;


  Query Match           100.0%;  Score 754;  DB 21;  Length 345;
  Best Local Similarity  100.0%;  Pred. No. 4.7e-71;
  Matches  136;  Conservative    0;  Mismatches    0;  Indels    0;  Gaps    0;

Qy       1 LDLEDLYRPTWQLLGKAFVFGRKSRVVDLNLLTEEVRLYSCTPRNFSVSIREELKRTDTI 60
           ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db     210 ldledlyrptwqllgkafvfgrksrvvdlnlltеevrlysctprnfsvsireelkrtdti 269

Qy      61 FWPGCLLVKRCGGNCACCLHNCNECQCVPSKVTKKYHEVLQLRPKTGVRGLHKSLTDVAL 120
           ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db     270 fwpgcllvkrcggncacclhncnecqcvpskvtkkyhevlqlrpktgvrglhksltdval 329

Qy     121 EHHEECDCVCRGSTGG 136
           ||||||||||||||||
Db     330 ehheecdcvcrgstgg 345


RESULT  24
AAB50980
ID   AAB50980 standard; Protein; 345 AA.
XX
AC   AAB50980;
XX
DT   21-MAR-2001  (first entry)
XX
DE   Human PRO200 protein.
XX
KW   Human; PRO; cardiant; antiangiogenic; antiarteriosclerotic; hypotensive;
KW   vasotropic; antirheumatic; antiarthritic; antiinflammatory; cytostatic;
KW   vulnerary; antianginal; gene therapy; cardiovascular disease;
KW   endothelial disorder; angiogenic disorder; cancer; periodontal disease;
KW   wound healing.
XX
OS   Homo sapiens.
XX
PN   WO200073445-A2.
XX
PD   07-DEC-2000.
XX
PF   17-MAY-2000; 2000WO-US13705.
XX
PR   02-JUN-1999;   99WO-US12252.
PR   23-JUN-1999;   99US-0141037.
PR   20-JUL-1999;   99US-0144758.
PR   26-JUL-1999;   99US-0145698.
PR   28-JUL-1999;   99US-0146222.
PR   01-SEP-1999;   99WO-US20111.
PR   30-NOV-1999;   99WO-US28313.
PR   30-NOV-1999;   99WO-US28409.
PR   02-DEC-1999;   99WO-US28565.
PR   16-DEC-1999;   99WO-US30095.
PR   11-FEB-2000; 2000WO-US03565.
PR   18-FEB-2000; 2000WO-US04341.
PR   18-FEB-2000; 2000WO-US04342.
PR   24-FEB-2000; 2000WO-US05004.
PR   02-MAR-2000; 2000WO-US05841.
PR   10-MAR-2000; 2000WO-US06319.
PR   15-MAR-2000; 2000WO-US06884.
PR   21-MAR-2000; 2000WO-US07532.
PR   30-MAR-2000; 2000WO-US08439.
XX
PA   (GETH ) GENENTECH INC.
XX
PI   Ashkenazi AJ,  Baker KP,  Ferrara N,  Gerber H,  Gerritsen ME;
PI   Goddard A,  Godowski PJ,  Gurney AL,  Kuo SS,  Mark MR,  Marsters SA;
PI   Paoni NF,  Pitti RM,  Watanabe CK,  Williams PM,  Wood WI;
XX
DR   WPI; 2001-025251/03.
DR   N-PSDB; AAC90564.
XX
PT   Seventeen nucleic acids encoding PRO polypeptides which are useful in
PT   diagnosis and treatment of cardiovascular, endothelial or angiogenic
PT   disorders in a mammal -
XX
PS   Claim 71; Fig 4; 182pp; English.
XX
CC   The present sequence is one of seventeen novel PRO polypeptides. The PRO
CC   nucleic acids, polypeptides, agonists and antagonists are useful for
CC   treating cardiovascular, endothelial or angiogenic disorders in a mammal.
CC   Examples of these disorders include cardiac hypertrophy, trauma, cancer,
CC   age-related macular degeneration, atherosclerosis, hypertension, arterial
CC   restenosis, Reynaud's disease, rheumatoid arthritis,  angina, myocardial
CC   infarctions, thrombophlebitis and lymphangitis. The PRO polypeptides and
CC   antagonists are also used to prevent tumour angiogenesis and for treating
CC   periodontal diseases. They are also used to stimulate wound healing and
CC   tissue regeneration. The PRO nucleic acids, polypeptides and anti-PRO
CC   antibodies are useful for diagnosing a cardiovascular, endothelial or
CC   angiogenic disorder.
XX
SQ   Sequence   345 AA;


  Query Match           100.0%;  Score 754;  DB 22;  Length 345;
  Best Local Similarity  100.0%;  Pred. No. 4.7e-71;
  Matches  136;  Conservative    0;  Mismatches    0;  Indels    0;  Gaps    0;

Qy       1 LDLEDLYRPTWQLLGKAFVFGRKSRVVDLNLLTEEVRLYSCTPRNFSVSIREELKRTDTI 60
           ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db     210 ldledlyrptwqllgkafvfgrksrvvdlnlltеevrlysctprnfsvsireelkrtdti 269
```

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Qy      61 FWPGCLLVKRCGGNCACCLHNCNECQCVPSKVTKKYHEVLQLRPKTGVRGLHKSLTDVAL 120
           ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db     270 fwpgcllvkrcggncacclhncnecqcvpskvtkkyhevlqlrpktgvrglhksltdval 329

Qy     121 EHHEECDCVCRGSTGG 136
           ||||||||||||||||
Db     330 ehheecdcvcrgstgg 345


RESULT  25
AAB49895
ID   AAB49895 standard; Protein; 345 AA.
XX
AC   AAB49895;
XX
DT   06-MAR-2001  (first entry)
XX
DE   Human PRO200 protein sequence.
XX
KW   Human; PRO526; PRO719; PRO200; PRO725; PRO1031; immune related disease;
KW   inflammation; thyroiditis; demyelinating disease; skin disease;
KW   infectious disease.
XX
OS   Homo sapiens.
XX
PN   WO200070050-A1.
XX
PD   23-NOV-2000.
XX
PF   21-MAR-2000; 2000WO-US07532.
XX
PR   14-MAY-1999;   99US-0134287.
XX
PA   (GETH ) GENENTECH INC.
XX
PI   Baker KP,  Chen J,  Ferrara N,  Fong S,  Goddard A,  Gurney AL;
PI   Hillan KJ,  Kuo SS,  Tumas D,  Wood WI;
XX
DR   WPI; 2001-025022/03.
DR   N-PSDB; AAC88962.
XX
PT   New compositions containing a PRO526, PRO719, PRO725, PRO1031 or PRO200
PT   proteins for modulating immune response or proliferation of
PT   T-lymphocytes in mammal, especially for treating immune related
PT   disorders, e.g. graft rejection -
XX
PS   Claim 31; Fig 10; 133pp; English.
XX
CC   The present invention discloses the coding and protein sequences of human
CC   proteins PRO526, PRO719, PRO725, PRO1031 and PRO200. These proteins,
CC   their coding sequences and antibodies can be used in the treatment of
CC   immune-related diseases, including systemic lupus erythematosus,
CC   rheumatoid arthritis, thyroiditis, immune-mediated renal disease,
CC   demyelinating diseases such as multiple sclerosis, hepatobiliary diseases
CC   including primary biliary cirrhosis, inflammatory bowel disease,
CC   immune-mediated skin diseases such as psoriasis, allergic diseases
CC   including asthma, immunologic diseases of the lung, transplantation
CC   associated diseases and infectious diseases such as HIV and hepatitis.
XX
SQ   Sequence   345 AA;


  Query Match           100.0%;  Score 754;  DB 22;  Length 345;
  Best Local Similarity  100.0%;  Pred. No. 4.7e-71;
  Matches  136;  Conservative    0;  Mismatches    0;  Indels    0;  Gaps    0;

Qy       1 LDLEDLYRPTWQLLGKAFVFGRKSRVVDLNLLTEEVRLYSCTPRNFSVSIREELKRTDTI 60
           ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db     210 ldledlyrptwqllgkafvfgrksrvvdlnllteevrlysctprnfsvsireelkrtdti 269

Qy      61 FWPGCLLVKRCGGNCACCLHNCNECQCVPSKVTKKYHEVLQLRPKTGVRGLHKSLTDVAL 120
           ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||

Db     270 fwpgcllvkrcggncacclhncnecqcvpskvtkkyhevlqlrpktgvrglhksltdval 329

Qy     121 EHHEECDCVCRGSTGG 136
           ||||||||||||||||
Db     330 ehheecdcvcrgstgg 345


RESULT  26
AAB53074
ID   AAB53074 standard; Protein; 345 AA.
XX
AC   AAB53074;
XX
DT   28-FEB-2001  (first entry)
XX
DE   Human angiogenesis-associated protein PRO200, SEQ ID NO:51.
XX
KW   Human; angiogenesis-associated protein; PRO; endothelial cell growth;
KW   cardiac hypertrophy; cardiovascular disorder; endothelial disorder;
KW   angiogenic disorder; atherosclerosis; osteoporosis; hypertension;
KW   myocardial infarction; diabetic retinopathy; rheumatoid arthritis;
KW   Crohn's disease; psoriasis; endometriosis; ulcer; wound healing; cancer;
KW   Alzheimer's disease; Huntington's disease; stroke; drug screening;
KW   gene therapy; transgenic animal.
XX
OS   Homo sapiens.
XX
PN   WO200053753-A2.
XX
PD   14-SEP-2000.
XX
PF   05-JAN-2000; 2000WO-US00219.
XX
PR   08-MAR-1999;   99WO-US05028.
PR   12-MAR-1999;   99US-0123957.
PR   14-MAY-1999;   99US-0134287.
PR   02-JUN-1999;   99WO-US12252.
PR   23-JUN-1999;   99US-0141037.
PR   20-JUL-1999;   99US-0144758.
PR   26-JUL-1999;   99US-0145698.
PR   01-SEP-1999;   99WO-US20111.
PR   08-SEP-1999;   99WO-US20594.
PR   15-SEP-1999;   99WO-US21090.
PR   15-SEP-1999;   99WO-US21547.
PR   05-OCT-1999;   99WO-US23089.
PR   30-NOV-1999;   99WO-US28313.
PR   30-NOV-1999;   99WO-US28409.
PR   02-DEC-1999;   99WO-US28564.
PR   02-DEC-1999;   99WO-US28565.
XX
PA   (GETH ) GENENTECH INC.
XX
PI   Ashkenazi AJ,  Baker KP,  Ferrara N,  Gerber H,  Goddard A;
PI   Godowski PJ,  Gurney AL,  Hillan KJ,  Kuo SS,  Mark MR,  Marsters SA;
PI   Paoni NF,  Pitti RM,  Watanabe CK,  Williams PM,  Wood WI;
XX
DR   WPI; 2001-090793/10.
DR   N-PSDB; AAC97404.
XX
PT   New isolated nucleic acid for producing a PRO polypeptide, analyzing
PT   genetic disorders and treating cardiovascular, endothelial or
PT   angiogenic disorders, such as atherosclerosis, wounds or cancer -
XX
PS   Claim 69; Fig 22; 293pp; English.
XX
CC   The invention relates to novel human angiogenesis-associated proteins
CC   designated PRO proteins (AAB53064-B53097), and to nucleic acids encoding
CC   PRO proteins. The invention also relates to vectors and host cells
CC   comprising a PRO nucleic acid, the recombinant production of a PRO
CC   protein, PRO antibodies specific for a PRO protein, fusion proteins
CC   comprising a PRO protein, agonists or antagonists of a PRO protein, and
CC   compounds which inhibit the expression of a PRO gene. The invention
CC   additionally encompasses methods of identifying modulators of PRO
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CC   expression or activity; diagnosing a cardiovascular, endothelial or
CC   angiogenic disorder, or a susceptibility to such a disorder by detecting
CC   mutations in a PRO gene, or the expression level of a PRO gene within a
CC   particular tissue; treating a cardiovascular, endothelial or angiogenic
CC   disorder via the administration of a PRO protein, PRO nucleic acid, or
CC   PRO agonist or antagonist; a retroviral gene therapy vector comprising a
CC   PRO nucleic acid; and methods of inhibiting or stimulating endothelial
CC   cell growth, cardiac hypertrophy or PRO-induced angiogenesis via the
CC   administration of a PRO protein, or an agonist or antagonist thereof.
CC   PRO nucleic acids, PRO proteins, antibodies against PRO proteins, PRO
CC   agonists and PRO antagonists may be used as therapeutic agents to treat
CC   cardiovascular, endothelial or angiogenic disorders, such as
CC   atherosclerosis, osteoporosis, myocardial infarction, hypertension,
CC   diabetic retinopathy, rheumatoid arthritis, Crohn's disease, psoriasis,
CC   endometriosis, ulcers, wounds, cancer, Alzheimer's disease, Huntington's
CC   disease, or stroke. PRO nucleic acids are additionally useful in the
CC   recombinant production of PRO proteins, as hybridisation probes to
CC   screen libraries to isolate cDNAs with sequence identity to PRO proteins,
CC   to map genes encoding PRO proteins, to analyse genetic disorders, and in
CC   gene therapy. PRO nucleic acids can also be used to produce transgenic
CC   animals useful for the development and screening of potential
CC   therapeutic agents. The present sequence represents a PRO protein of the
CC   invention.
XX
SQ   Sequence   345 AA;


  Query Match             100.0%;  Score 754;  DB 22;  Length 345;
  Best Local Similarity   100.0%;  Pred. No. 4.7e-71;
  Matches  136;  Conservative    0;  Mismatches    0;  Indels    0;  Gaps    0;

Qy       1 LDLEDLYRPTWQLLGKAFVFGRKSRVVDLNLLTEEVRLYSCTPRNFSVSIREELKRTDTI 60
           ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db     210 ldledlyrptwqllgkafvfgrksrvvdlnllteevrlysctprnfsvsireelkrtdti 269

Qy      61 FWPGCLLVKRCGGNCACCLHNCNECQCVPSKVTKKYHEVLQLRPKTGVRGLHKSLTDVAL 120
           ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db     270 fwpgcllvkrcggncacclhncnecqcvpskvtkkyhevlqlrpktgvrglhksltdval 329

Qy     121 EHHEECDCVCRGSTGG 136
           ||||||||||||||||
Db     330 ehheecdcvcrgstgg 345


RESULT  27
AAB10639
ID   AAB10639 standard; Protein; 374 AA.
XX
AC   AAB10639;
XX
DT   19-JAN-2001  (first entry)
XX
DE   Human VEGF-X protein for expression in mammalian systems.
XX
KW   VEGF-X; vascular endothelial growth factor; human; vulnerary; cytostatic;
KW   antirheumatic; antiarthritic; antipsoriatic; antidiabetic; treatment;
KW   angiogenesis regulator; vascularization regulator; cancer; psoriasis;
KW   rheumatoid arthritis; diabetic retinopathy; blood vessel; organ repair;
KW   tissue regeneration; tissue repair; wound; dermal ulcer; pressure sore;
KW   venous sore; diabetic ulcer; burns; skin graft growth.
XX
OS   Homo sapiens.
XX
PN   WO200037641-A2.
XX
PD   29-JUN-2000.
XX
PF   21-DEC-1999;   99WO-US30503.
XX
PR   22-DEC-1998;   98GB-0028377.
PR   18-MAR-1999;   99US-0124967.
PR   08-NOV-1999;   99US-0164131.
XX
PA   (JANC ) JANSSEN PHARM NV.
XX
PI   Gordon RD,  Sprengel JJ,  Yon JR,  Dijkmans JJH,  Gosiewska A;
PI   Dhanaraj SN,  Xu J;
XX
DR   WPI; 2000-442669/38.
DR   N-PSDB; AAA71983.
XX
PT   New vascular endothelial growth factor protein, useful for treating or
PT   preventing diseases associated with inappropriate angiogenesis activity
PT   such as cancer, rheumatoid arthritis, psoriasis and wounds -
XX
PS   Disclosure; Fig 19; 127pp; English.
XX
CC   This invention describes a novel vascular endothelial growth factor-X
CC   (VEGF-X) protein (Ia) and its encoding polynucleotide (IIa) which has
CC   vulnerary, cytostatic, antirheumatic, antiarthritic, antipsoriatic and
CC   antidiabetic activity and acts as an angiogenesis and vascularization
CC   regulator. An antisense molecule of the invention is useful for treating
CC   or preventing cancer, rheumatoid arthritis, psoriasis and diabetic
CC   retinopathy by inhibiting angiogenic activity or inappropriate
CC   vascularization including formation and proliferation of new blood
CC   vessels, growth and development of tissues, tissue regeneration and organ
CC   and tissue repair in a subject. The products of the invention are useful
CC   for preparing medicaments for treating wounds such as dermal ulcers,
CC   pressure sores, venous sores, diabetic ulcers and burns and to promote
CC   skin graft growth, tissue repair, proliferation of new blood vessels,
CC   tissue regeneration and organ repair by promoting angiogenic activity or
CC   vascularization. This sequence represents a human VEGF-X protein which
CC   can be expressed in mammalian systems and which is described in the
CC   method of the invention.
XX
SQ   Sequence   374 AA;


  Query Match             100.0%;  Score 754;  DB 21;  Length 374;
  Best Local Similarity   100.0%;  Pred. No. 5.1e-71;
  Matches  136;  Conservative    0;  Mismatches    0;  Indels    0;  Gaps    0;

Qy       1 LDLEDLYRPTWQLLGKAFVFGRKSRVVDLNLLTEEVRLYSCTPRNFSVSIREELKRTDTI 60
           ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db     210 ldledlyrptwqllgkafvfgrksrvvdlnllteevrlysctprnfsvsireelkrtdti 269

Qy      61 FWPGCLLVKRCGGNCACCLHNCNECQCVPSKVTKKYHEVLQLRPKTGVRGLHKSLTDVAL 120
           ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db     270 fwpgcllvkrcggncacclhncnecqcvpskvtkkyhevlqlrpktgvrglhksltdval 329

Qy     121 EHHEECDCVCRGSTGG 136
           ||||||||||||||||
Db     330 ehheecdcvcrgstgg 345


RESULT  28
AAB10640
ID   AAB10640 standard; Protein; 354 AA.
XX
AC   AAB10640;
XX
DT   19-JAN-2001  (first entry)
XX
DE   Human VEGF-X protein for expression in Baculovirus/insect cell systems.
XX
KW   VEGF-X; vascular endothelial growth factor; human; vulnerary; cytostatic;
KW   antirheumatic; antiarthritic; antipsoriatic; antidiabetic; treatment;
KW   angiogenesis regulator; vascularization regulator; cancer; psoriasis;
KW   rheumatoid arthritis; diabetic retinopathy; blood vessel; organ repair;
KW   tissue regeneration; tissue repair; wound; dermal ulcer; pressure sore;
KW   venous sore; diabetic ulcer; burns; skin graft growth.
XX
OS   Homo sapiens.
XX
PN   WO200037641-A2.
XX
```

PD 29-JUN-2000.
XX
PF 21-DEC-1999; 99WO-US30503.
XX
PR 22-DEC-1998; 98GB-0028377.
PR 18-MAR-1999; 99US-0124967.
PR 08-NOV-1999; 99US-0164131.
XX
PA (JANC) JANSSEN PHARM NV.
XX
PI Gordon RD, Sprengel JJ, Yon JR, Dijkmans JJH, Gosiewska A;
PI Dhanaraj SN, Xu J;
XX
DR WPI; 2000-442669/38.
DR N-PSDB; AAA71984.
XX
PT New vascular endothelial growth factor protein, useful for treating or
PT preventing diseases associated with inappropriate angiogenesis activity
PT such as cancer, rheumatoid arthritis, psoriasis and wounds -
XX
PS Disclosure; Fig 20; 127pp; English.
XX
CC This invention describes a novel vascular endothelial growth factor-X
CC (VEGF-X) protein (Ia) and its encoding polynucleotide (IIa) which has
CC vulnerary, cytostatic, antirheumatic, antiarthritic, antipsoriatic and
CC antidiabetic activity and acts as an angiogenesis and vascularization
CC regulator. An antisense molecule of the invention is useful for treating
CC or preventing cancer, rheumatoid arthritis, psoriasis and diabetic
CC retinopathy by inhibiting angiogenic activity or inappropriate
CC vascularization including formation and proliferation of new blood
CC vessels, growth and development of tissues, tissue regeneration and organ
CC and tissue repair in a subject. The products of the invention are useful
CC for preparing medicaments for treating wounds such as dermal ulcers,
CC pressure sores, venous sores, diabetic ulcers and burns and to promote
CC skin graft growth, tissue repair, proliferation of new blood vessels,
CC tissue regeneration and organ repair by promoting angiogenic activity or
CC vascularization. This sequence represents a human VEGF-X protein which
CC can be expressed in Baculovirus/insect cell systems and which is
CC described in the method of the invention.
XX
SQ Sequence 354 AA;

Query Match 98.7%; Score 744; DB 21; Length 354;
Best Local Similarity 99.3%; Pred. No. 5.4e-70;
Matches 135; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

```
Qy      1 LDLEDLYRPTWQLLGKAFVFGRKSRVVDLNLLTEEVRLYSCTPRNFSVSIREELKRTDTI 60
          ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db    219 ldledlyrptwqllgkafvfgrksrvvdlnllteevrlysctprnfsvsireelkrtdti 278

Qy     61 FWPGCLLVKRCGGNCACCLHNCNECQCVPSKVTKKYHEVLQLRPKTGVRGLHKSLTDVAL 120
          ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db    279 fwpgcllvkrcggncacclhncnecqcvpskvtkkyhevlqlrpktgvrglhksltdval 338

Qy    121 EHHEECDCVCRGSTGG 136
          ||||| ||||||||||
Db    339 ehheesdcvcrgstgg 354
```

RESULT 29
AAB10641
ID AAB10641 standard; Protein; 354 AA.
XX
AC AAB10641;
XX
DT 19-JAN-2001 (first entry)
XX
DE Human VEGF-X protein for expression in E. coli systems.
XX
KW VEGF-X; vascular endothelial growth factor; human; vulnerary; cytostatic;
KW antirheumatic; antiarthritic; antipsoriatic; antidiabetic; treatment;
KW angiogenesis regulator; vascularization regulator; cancer; psoriasis;
KW rheumatoid arthritis; diabetic retinopathy; blood vessel; organ repair;
KW tissue regeneration; tissue repair; wound; dermal ulcer; pressure sore;
KW venous sore; diabetic ulcer; burns; skin graft growth.
XX
OS Homo sapiens.
XX
PN WO200037641-A2.
XX
PD 29-JUN-2000.
XX
PF 21-DEC-1999; 99WO-US30503.
XX
PR 22-DEC-1998; 98GB-0028377.
PR 18-MAR-1999; 99US-0124967.
PR 08-NOV-1999; 99US-0164131.
XX
PA (JANC) JANSSEN PHARM NV.
XX
PI Gordon RD, Sprengel JJ, Yon JR, Dijkmans JJH, Gosiewska A;
PI Dhanaraj SN, Xu J;
XX
DR WPI; 2000-442669/38.
DR N-PSDB; AAA71985.
XX
PT New vascular endothelial growth factor protein, useful for treating or
PT preventing diseases associated with inappropriate angiogenesis activity
PT such as cancer, rheumatoid arthritis, psoriasis and wounds -
XX
PS Disclosure; Fig 21; 127pp; English.
XX
CC This invention describes a novel vascular endothelial growth factor-X
CC (VEGF-X) protein (Ia) and its encoding polynucleotide (IIa) which has
CC vulnerary, cytostatic, antirheumatic, antiarthritic, antipsoriatic and
CC antidiabetic activity and acts as an angiogenesis and vascularization
CC regulator. An antisense molecule of the invention is useful for treating
CC or preventing cancer, rheumatoid arthritis, psoriasis and diabetic
CC retinopathy by inhibiting angiogenic activity or inappropriate
CC vascularization including formation and proliferation of new blood
CC vessels, growth and development of tissues, tissue regeneration and organ
CC and tissue repair in a subject. The products of the invention are useful
CC for preparing medicaments for treating wounds such as dermal ulcers,
CC pressure sores, venous sores, diabetic ulcers and burns and to promote
CC skin graft growth, tissue repair, proliferation of new blood vessels,
CC tissue regeneration and organ repair by promoting angiogenic activity or
CC vascularization. This sequence represents a human VEGF-X protein which
CC can be expressed in E. coli systems and which is described in the method
CC of the invention.
XX
SQ Sequence 354 AA;

Query Match 98.7%; Score 744; DB 21; Length 354;
Best Local Similarity 99.3%; Pred. No. 5.4e-70;
Matches 135; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

```
Qy      1 LDLEDLYRPTWQLLGKAFVFGRKSRVVDLNLLTEEVRLYSCTPRNFSVSIREELKRTDTI 60
          ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db    219 ldledlyrptwqllgkafvfgrksrvvdlnllteevrlysctprnfsvsireelkrtdti 278

Qy     61 FWPGCLLVKRCGGNCACCLHNCNECQCVPSKVTKKYHEVLQLRPKTGVRGLHKSLTDVAL 120
          ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db    279 fwpgcllvkrcggncacclhncnecqcvpskvtkkyhevlqlrpktgvrglhksltdval 338

Qy    121 EHHEECDCVCRGSTGG 136
          ||||| ||||||||||
Db    339 ehheesdcvcrgstgg 354
```

RESULT 30
AAB48658
ID AAB48658 standard; Protein; 345 AA.
XX
AC AAB48658;

```
XX
DT   09-MAR-2001  (first entry)
XX
DE   Mouse zvegf3, SEQ ID NO:35.
XX
KW   Mouse; zvegf3; zvegf4 fusion; growth factor homologue; VEGF/PDGF family;
KW   murine; CUB domain; PDGF-like activity; mitogenic; osteogenic;
KW   neovascularisation; tissue repair; proliferation; differentiation;
KW   liver damage; neuroregenerative; Alzheimer's disease; multiple sclerosis;
KW   periodontal disease; bone fracture; wound healing; vulnerary; ischaemia;
KW   immunomodulation; hepatic.
XX
OS   Mus musculus.
XX
PN   WO200066736-A1.
XX
PD   09-NOV-2000.
XX
PF   03-MAY-2000; 2000WO-US40047.
XX
PR   03-MAY-1999;   99US-0304216.
PR   10-NOV-1999;   99US-0164463.
PR   04-FEB-2000; 2000US-0180169.
XX
PA   (ZYMO ) ZYMOGENETICS INC.
XX
PI   Gilbert T,  Hart CE,  Sheppard PO,  Gilbertson DG;
XX
DR   WPI; 2000-687541/67.
DR   N-PSDB; AAC81583.
XX
PT   Growth factor homologs and the nucleic acids that encode them, useful
PT   e.g. for treating liver damage, ischemia, multiple sclerosis and
PT   Alzheimer's disease -
XX
PS   Disclosure; Page 130-131; 143pp; English.
XX
CC   The invention relates to the human growth factor homologue zvegf4
CC   (AAB48653), and nucleic acids encoding it (AAC81555). Zvegf4 is a member
CC   of the PDGF (platelet-derived growth factor)/VEGF (vascular endothelial
CC   growth factor) family. Zvegf4 has a growth factor domain (AAB48654)
CC   characterised by a PDGF cystine knot structure, and a CUB domain
CC   (AAB48655) which has a beta barrel structure. Zvegf4 has PDGF-like
CC   activity, having mitogenic activity on fibroblasts, vascular smooth
CC   muscle cells and pericytes, and has also been shown to stimulate bone
CC   growth. The invention also relates to fusion proteins comprising human
CC   zvegf4 or fragments thereof, particularly human zvegf4/human zvegf3
CC   fusions; expression constructs and host cells comprising human zvegf4
CC   nucleic acids; the recombinant expression of human zvegf4; an antibody
CC   which binds to human zvegf4 or a fragment thereof; a method of activating
CC   a cell-surface PDGF receptor using a zvegf4-derived polypeptide; a
CC   method of modulating the proliferation, differentiation, migration or
CC   metabolism of bone cells, comprising exposing bone cells to
CC   zvegf4-derived polypeptides; and a method of detecting a genetic
CC   abnormality in the zvegf4 gene of a patient. Zvegf4 proteins and derived
CC   fragments may be used to stimulate tissue development or repair, or
CC   cellular differentiation or proliferation. They are particularly used for
CC   the treatment or repair of liver damage, and may also be used to
CC   modulate neurite growth (e.g., in the treatment of Alzheimer's disease or
CC   multiple sclerosis). Due to their osteogenic activity, they may be used
CC   in the treatment of periodontal disease and fractures. They may also be
CC   used to enhance expansion and mobilisation of haematopoietic stem cells
CC   and endothelial precursor stem cells, which may be useful in the
CC   treatment of ischaemia, in wound healing, and in the modulation of the
CC   immune system. The present sequence represents mouse zvegf3.
XX
SQ   Sequence   345 AA;

  Query Match           92.4%;  Score 697;  DB 21;  Length 345;
  Best Local Similarity 89.0%;  Pred. No. 4.4e-65;
  Matches  121;  Conservative   11;  Mismatches    4;  Indels    0;  Gaps    0;

Qy        1 LDLEDLYRPTWQLLGKAFVFGRKSRVVDLNLLTEEVRLYSCTPRNFSVSIREELKRTDTI 60
            :||: ||:||||||||||::|:||:||:|||| |||:||||||||||||||||||||||
Db      210 vdldslykptwqllgkaflygkkskvvnlnllkeevklysctprnfsvsireelkrtdti 269

Qy       61 FWPGCLLVKRCGGNCACCLHNCNECQCVPSKVTKKYHEVLQLRPKTGVRGLHKSLTDVAL 120
            |||||||||||||||||||||||||||| ||||||||||||||||:||||||||||
Db      270 fwpgcllvkrcggncacclhncnecqcvprkvtkkyhevlqlrpktgvkglhksltdval 329

Qy      121 EHHEECDCVCRGSTGG 136
            |||||||||||: ||
Db      330 ehheecdcvcrgnagg 345


RESULT  31
AAY96861
ID   AAY96861 standard; Protein; 345 AA.
XX
AC   AAY96861;
XX
DT   26-SEP-2000  (first entry)
XX
DE   Murine vascular endothelial growth factor homologue, ZVEGF3.
XX
KW   Vascular endothelial growth factor; homologue; zvegf3; CUB domain;
KW   Cysteine knot; platelet-derived growth factor; PDGF; neuropilin;
KW   chromosome 4q28.3; cytostatic; anti-psoriatic; anti-inflammatory;
KW   anti-diabetic; ophthalmological; anti-rheumatic; anti-arthritic;
KW   vulnerary.
XX
OS   Mus musculus.
XX
PN   WO200034474-A2.
XX
PD   15-JUN-2000.
XX
PF   07-DEC-1999;   99WO-US28968.
XX
PR   07-DEC-1998;   98US-0207120.
PR   06-JUL-1999;   99US-0142576.
PR   21-OCT-1999;   99US-0161653.
PR   12-NOV-1999;   99US-0165255.
XX
PA   (ZYMO ) ZYMOGENETICS INC.
XX
PI   Gao Z,  Hart CE,  Piddington CS,  Sheppard PO,  Shoemaker KE;
PI   Gilbertson DG,  West JW;
XX
DR   WPI; 2000-423420/36.
DR   N-PSDB; AAA51527.
XX
PT   Novel zvegf3 polypeptides and nucleotides encoding them useful for
PT   stimulating growth of smooth muscle cells and fibroblasts comprising an
PT   epitope bearing portion of a specific amino acid sequence
XX
PS   Claim 1; Page 169-170; 173pp; English.
XX
CC   This shows a murine ZVEGF3 a novel vascular endothelial growth factor
CC   homologue. Polypeptides comprising an epitope-bearing portion human or
CC   murine ZVEGF3 are claimed. The growth factors comprise a growth factor
CC   domain and a CUB domain (generic sequence motifs are shown in AAY96859
CC   and AAY96860). The growth factor domain is characterized by an
CC   arrangement of cysteine residues and beta-strands that is characteristic
CC   of the "cysteine knot" structure of the platelet-derived growth factor
CC   (PDGF) family. The CUB domain shows homology to CUB domains in
CC   neuropilins, human bone morphogenetic protein-1, porcine seminal plasma
CC   protein, bovine acidic seminal fluid protein and Xenopus laevis
CC   tolloid-like protein. Structural analysis and homology predict that
CC   ZVEGF3 polypeptides complex with a second polypeptide to form multimeric
CC   proteins. The human zvegf3 gene has been mapped to chromosome 4q28.3.
CC   ZVEGF3 is useful for stimulating the growth of fibroblasts or smooth
CC   muscles cells, for activating cell surface PDGF-alpha receptor and for
CC   inhibiting PDGF-alpha receptor mediated cellular processes. ZVEGF3 is
CC   useful for regulating (post-development) organ growth, regeneration and
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CC maintenance, as well as tissue maintenance and repair processes. ZVEGF3
CC antagonists are useful for treating cancer, rheumatoid arthritis,
CC diabetic retinopathy, ischemic limb disease, peripheral vascular
CC disease, myocardial ischemia, vascular intimal hyperplasia,
CC atherosclerosis, wound healing, chronic liver disease and haemangioma
CC formation. ZVEGF3 can also be used to modulate neurite growth and
CC development of the nervous system, and for treating neurodegenerative
CC diseases.
XX
SQ Sequence 345 AA;

Query Match 92.4%; Score 697; DB 21; Length 345;
Best Local Similarity 89.0%; Pred. No. 4.4e-65;
Matches 121; Conservative 11; Mismatches 4; Indels 0; Gaps 0;

Qy 1 LDLEDLYRPTWQLLGKAFVFGRKSRVVDLNLLTEEVRLYSCTPRNFSVSIREELKRTDTI 60
Db 210 vdldslykptwqllgkaflygkkskvvnlnllkeevklysctprnfsvsireelkrtdti 269

Qy 61 FWPGCLLVKRCGGNCACCLHNCNECQCVPSKVTKKYHEVLQLRPKTGVRGLHKSLTDVAL 120
Db 270 fwpgcllvkrcggncacclhncnecqcvprkvtkkyhevlqlrpktgvkglhksltdval 329

Qy 121 EHHEECDCVCRGSTGG 136
Db 330 ehheecdcvcrgnagg 345

RESULT 32
AAY84559
ID AAY84559 standard; Protein; 345 AA.
XX
AC AAY84559;
XX
DT 25-JUL-2000 (first entry)
XX
DE A murine platelet-derived growth factor C (PDGF-C).
XX
KW Platelet-derived growth factor C; PDGF-C; cell proliferation;
KW growth factor; heparin; connective tissue; wound healing; VEGF-F;
KW fibroblast mitogenesis; PDGF alpha receptor activation; tumour growth;
KW choriocarcinoma; Wilms tumour; megakaryoblastic leukaemia;
KW lung carcinoma; erythroleukemia; tissue remodelling.
XX
OS Mus sp.
XX
PN WO200018212-A2.
XX
PD 06-APR-2000.
XX
PF 30-SEP-1999; 99WO-US22668.
XX
PR 30-SEP-1998; 98US-0102461.
PR 12-NOV-1998; 98US-0108109.
PR 03-DEC-1998; 98US-0110749.
PR 18-DEC-1998; 98US-0113002.
PR 21-MAY-1999; 99US-0135426.
PR 15-JUL-1999; 99US-0144022.
XX
PA (LUDW-) LUDWIG INST CANCER RES.
PA (UYHE-) UNIV HELSINKI LICENSING LTD.
XX
PI Eriksson U, Aase K, Lee X, Ponten A, Uutela M, Alitalo K;
PI Oestman A, Heldin C, Betsholz C;
XX
DR WPI; 2000-292954/25.
DR N-PSDB; AAA12525.
XX
PT Novel DNA encoding PDGF-C useful to stimulate or enhance proliferation,
PT differentiation, growth and motility of cells expressing the PDGF-C
PT receptor -
XX
PS Claim 27; Fig 6; 135pp; English.
XX
CC The present sequence represents murine platelet-derived growth factor C
CC (PDGF-C) (formally designated VEGF-F). PDGF-C polypeptides have the
CC ability to stimulate and enhance proliferation or differentiation,
CC and/or growth or motility of cells expressing a PDGF-C receptor.
CC PDGF-C polypeptides can be used in pharmaceuticals for promoting cell
CC proliferation, preferably in combination with one other growth factor
CC and heparin. Pharmaceuticals comprising PDGF-C polypeptides can also
CC be used for stimulating connective tissue or wound healing. The
CC PDGF-C polypeptide can be enzymatically processed to generate the active
CC truncated form of PDGF-C and used to regulate the receptor-binding
CC specificity of PDGF-C. PDGF-C can also be used to promote fibroblast
CC mitogenesis in a mammal and to induce PDGF alpha receptor activation.
CC PDGF-C antagonists can be used to inhibit tumour growth of a tumour
CC expressing PDGF-C in a mammal. Specific types of human tumours, e.g.
CC choriocarcinoma, Wilms tumour, megakaryoblastic leukaemia, lung carcinoma
CC and erythroleukemia, can be identified by testing for expression of
CC PDGF-C. PDGF-C antagonists can also be used to inhibit tissue
CC remodelling during invasion of tumour cells into a normal population of
CC cells. Antagonists can also be used to treat fibrotic conditions,
CC especially found in the lung, kidney or liver.
XX
SQ Sequence 345 AA;

Query Match 92.4%; Score 697; DB 21; Length 345;
Best Local Similarity 89.0%; Pred. No. 4.4e-65;
Matches 121; Conservative 11; Mismatches 4; Indels 0; Gaps 0;

Qy 1 LDLEDLYRPTWQLLGKAFVFGRKSRVVDLNLLTEEVRLYSCTPRNFSVSIREELKRTDTI 60
Db 210 vdldslykptwqllgkaflygkkskvvnlnllkeevklysctprnfsvsireelkrtdti 269

Qy 61 FWPGCLLVKRCGGNCACCLHNCNECQCVPSKVTKKYHEVLQLRPKTGVRGLHKSLTDVAL 120
Db 270 fwpgcllvkrcggncacclhncnecqcvprkvtkkyhevlqlrpktgvkglhksltdval 329

Qy 121 EHHEECDCVCRGSTGG 136
Db 330 ehheecdcvcrgnagg 345

Search completed: August 29, 2001, 09:46:55
Job time: 31 sec